This Statutory Instrument supersedes S.I.1999/3194 published on 29th February 2000 and is being issued free of charge to all known recipients of that Statutory Instrument.

STATUTORY INSTRUMENTS

## 2000 No. 2897

# **CONSUMER PROTECTION**

The Dangerous Substances and Preparations (Safety) (Consolidation) and Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regulations 2000

| Made                   |   | 20th October 2000  |
|------------------------|---|--------------------|
| Laid before Parliament |   | 25th October 2000  |
| Coming into force -    | - | 27th November 2000 |

Whereas the Secretary of State has, in accordance with section 11(5) of the Consumer Protection Act 1987(1), consulted such organisations as appear to him to be representative of interests substantially affected by these Regulations, such other persons as he considers appropriate and the Health and Safety Commission:

And whereas the Secretary of State is a Minister designated(2) for the purpose of section 2(2) of the European Communities Act 1972(3) in relation to the regulation and control of classification packaging and labelling of dangerous substances and preparations, and for measures related to consumer protection;

Now therefore, the Secretary of State in exercise of the powers conferred on him by section 11 of the said Act of 1987 and by section 2(2) of the said Act of 1972 hereby makes the following Regulations:—

#### Title and commencement

**1.**—(1) These Regulations may be cited as the Dangerous Substances and Preparations (Safety) (Consolidation) and Chemicals (Hazard Information and Packaging for Supply) (Amendment) Regulations 2000.

(2) These Regulations shall come into force on 27th November 2000.

<sup>(</sup>**1**) 1987 c. 43.

<sup>(2)</sup> S.I. 1976/897 and 1993/2661.

<sup>(</sup>**3**) 1972 c. 68.

#### Revocation

**2.** The Dangerous Substances and Preparations (Safety) (Consolidation) (Amendment) (No. 2) Regulations 1999(**4**) and the Chemicals (Hazard Information and Packaging for Supply) (Amendment) (No. 3) Regulations 1999(**5**) are revoked.

#### Amendment of the Dangerous Substances and Preparations (Safety) (Consolidation) Regulations 1994

**3.** The table in Schedule 1 shall be substituted for the table in Schedule 2 to the Dangerous Substances and Preparations (Safety) (Consolidation) Regulations 1994(**6**).

# Amendment of the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994

**4.**—(1) The table in Schedule 1 shall be substituted for the table in Part III of Schedule 6 to the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994(7), it shall become part A of that Schedule and for the heading there shall be inserted "SUBSTANCES REQUIRING ADDITIONAL LABELLING PHRASE".

(2) Schedule 2 shall be inserted in Schedule 6 to those Regulations as Part IIIB.

*Kim Howells,* Parliamentary Under-Secretary of State for Consumers and Corporate Affairs, Department of Trade and Industry

20th October 2000

<sup>(</sup>**4**) S.I. 1999/3193.

<sup>(5)</sup> S.I. 1999/3194.

<sup>(6)</sup> S.I. 1994/2844, amended by S.I. 1996/2635 which inserted Schedule 2. The 1994 Regulations have also been amended by S.I. 1999/2084 in a manner not relevant to these Regulations.

<sup>(7)</sup> S.I. 1994/3247, amended by S.I. 1996/1092 which inserted Part III of Schedule 6. The 1994 Regulations have also been amended by S.I. 1999/197, S.I. 1999/3165 and S.I. 2000/2381 in a manner not relevant to these Regulations.

#### SCHEDULE 1

Regulations 3 and 4(1)

### "Carcinogenic substances of Category 1

| Substances  | Index Number | EC number | CAS number |
|---|--------------|-----------|------------|
| Chromium trioxide   | 024-001-00-0 | 215-607-8 | 1333-82-0  |
| inc chromates<br>neluding zinc<br>otassium chromate             | 024-007-00-3 |           |            |
| ickel monoxide  | 028-003-00-2 | 215-215-7 | 1313-99-1  |
| ickel dioxide   | 028-004-00-8 | 234-823-3 | 12035-36-8 |
| inickel trioxide  | 028-005-00-3 | 215-217-8 | 1314-06-3  |
| ickel sulphide  | 028-006-00-9 | 240-841-2 | 16812-54-7 |
| ickel subsulphide   | 028-007-00-4 | 234-829-6 | 12035-72-2 |
| iarsenic trioxide;<br>rsenic trioxide                           | 033-003-00-0 | 215-481-4 | 1327-53-3  |
| rsenic pentoxide;<br>rsenic oxide                               | 033-004-00-6 | 215-116-9 | 1303-28-2  |
| senic acid and its  | 033-005-00-1 |           |            |
| ad hydrogen arsenate  | 082-011-00-0 | 232-064-2 | 7784-40-9  |
| enzene  | 601-020-00-8 | 200-753-7 | 71-43-2    |
| nyl chloride;<br>lloroethylene                                  | 602-023-00-7 | 200-831-0 | 75-01-4    |
| is (chloromethyl)<br>her  | 603-046-00-5 | 208-832-8 | 542-88-1   |
| hloromethyl methyl<br>her; chlorodimethyl<br>her                | 603-075-00-3 | 203-480-1 | 107-30-2   |
| -naphthylamine; beta-<br>aphthylamine                           | 612-022-00-3 | 202-080-4 | 91-59-8    |
| enzidine; 4,4'-<br>aminobiphenyl;<br>phenyl-4,4'-<br>enediamine | 612-042-00-2 | 202-199-1 | 92-87-5    |
| lts of benzidine  | 612-070-00-5 |           |            |
| lts of 2-<br>aphthylamine                                       | 612-071-00-0 |           |            |
| iphenyl-4-ylamine;<br>enylamine; 4-<br>ninobiphenyl             | 612-072-00-6 | 202-177-1 | 92-67-1    |

| Substances  | Index Number | EC number | CAS number |
|---|--------------|-----------|------------|
| salts of biphenyl-4-<br>ylamine; salts of<br>xenylamine; salts of 4-<br>aminobiphenyl   | 612-073-00-1 |           |            |
| Tar, coal; coal tar (The<br>by-product from the<br>destructive distillation<br>of coal. Almost<br>black semisolid. A<br>complex combination<br>of aromatic<br>hydrocarbons,<br>phenolic compounds,<br>nitrogen bases and<br>thiophene.)   | 648-081-00-7 | 232-361-7 | 8007-45-2  |
| Tar, coal, high-<br>temp.; Coal tar (The<br>condensation product<br>obtained by cooling, to<br>approximately ambient<br>temperature, the gas<br>evolved in the high<br>temperature (greater<br>than 700°C (1292°F))<br>destructive distillation<br>of coal. A black<br>viscous liquid denser<br>than water. Composed<br>primarily of a complex<br>mixture of condensed<br>ring aromatic<br>hydrocarbons.<br>May contain minor<br>amounts of phenolic<br>compounds and<br>aromatic nitrogen<br>bases.) | 648-082-00-2 | 266-024-0 | 65996-89-6 |
| Tar, coal, low-<br>temp.; Coal oil (The<br>condensation product<br>obtained by cooling,<br>to approximately<br>ambient temperature,<br>the gas evolved in<br>low temperature (less<br>than 700°C (1292°F))<br>destructive distillation<br>of coal. A black<br>viscous liquid denser<br>than water. Composed   | 648-083-00-8 | 266-025-6 | 65996-90-9 |

| Substances  | Index Number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| primarily of condensed<br>ring aromatic<br>hydrocarbons,<br>phenolic compounds,<br>aromatic nitrogen<br>bases, and their alkyl<br>derivatives.)   |              |           |             |
| Tar brown-coal;<br>(An oil distilled<br>from brown-coal<br>tar. Composed<br>primarily of aliphatic,<br>naphthenic and one-<br>to three-ring aromatic<br>hydrocarbons, their<br>alkyl derivatives,<br>heteroaromatics<br>and one- and two-<br>ring phenols boiling<br>in the range of<br>approximately 150°C<br>to 360°C (302°F to<br>680°F).) | 648-145-00-4 | 309-885-0 | 101316-83-0 |
| Tar, brown-coal, low<br>temp; (A tar obtained<br>from low temperature<br>carbonization and<br>low temperature<br>gasification of brown<br>coal. Composed<br>primarily of aliphatic,<br>naphthenic and<br>cyclic aromatic<br>hydrocarbons,<br>heteroaromatic<br>hydrocarbons and<br>cyclic phenols.)   | 648-146-00-X | 309-886-6 | 101316-84-1 |
| Distillates (petroleum),<br>light paraffinic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination<br>of hydrocarbons<br>produced by<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having  | 649-050-00-0 | 265-051-5 | 64741-50-1  |

| Substances  | Index Number | EC number | CAS number |
|---|--------------|-----------|------------|
| carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil with a<br>viscosity of less than<br>100 SUS at 100°F (19<br>cS at 40°C). It contains<br>a relatively large<br>proportion of saturated<br>aliphatic hydrocarbons<br>normally present in<br>this distillation range<br>of crude oil.)  |              |           |            |
| Distillates (petroleum),<br>heavy paraffinic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination<br>of hydrocarbons<br>produced by<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>20</sub> through<br>C <sub>50</sub> , and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains a relatively<br>large proportion of<br>saturated aliphatic<br>hydrocarbons.) | 649-051-00-6 | 265-052-0 | 64741-51-1 |
| Distillates (petroleum),<br>light naphthenic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination<br>of hydrocarbons<br>produced by<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude  | 649-052-00-1 | 265-053-6 | 64741-52-2 |

| Substances  | Index Number | EC number | CAS number |
|---|--------------|-----------|------------|
| oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ , and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.)   |              |           |            |
| Distillates (petroleum),<br>heavy naphthenic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination<br>of hydrocarbons<br>produced by<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ , and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-053-00-7 | 265-054-1 | 64741-53-3 |
| Distillates (petroleum),<br>acid-treated heavy<br>naphthenic; Unrefined<br>or mildly refined<br>baseoil (A complex<br>combination of<br>hydrocarbons obtained<br>as a raffinate from a<br>sulphuric acid treating<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ , and produces a   | 649-054-00-2 | 265-117-3 | 64742-18-3 |

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| Substances   | Index Number | EC number | CAS number |
|--|--------------|-----------|------------|
| finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.)  |              |           |            |
| Distillates (petroleum),<br>acid-treated light<br>naphthenic; Unrefined<br>or mildly refined<br>baseoil (A complex<br>combination of<br>hydrocarbons obtained<br>as a raffinate from a<br>sulphuric acid treating<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ , and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-055-00-8 | 265-118-9 | 64742-19-4 |
| Distillates (petroleum),<br>acid-treated heavy<br>paraffinic; Unrefined<br>or mildly refined<br>baseoil (A complex<br>combination of<br>hydrocarbons obtained<br>as a raffinate from<br>a sulphuric acid<br>process. It consists<br>predominantly<br>of saturated<br>hydrocarbons having   | 649-056-00-3 | 265-119-4 | 64742-20-7 |
| carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ , and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F (19<br>cSt at 40°C).)   |              |           |            |

| Substances   | Index Number | EC number | CAS number |
|--|--------------|-----------|------------|
| paraffinic; Unrefined<br>or mildly refined<br>baseoil (A complex<br>combination of<br>hydrocarbons obtained<br>as a raffinate from<br>a sulphuric acid<br>treating process. It<br>consists predominantly<br>of saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ , and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F (19<br>cSt at 40°C).)  |              |           |            |
| Distillates (petroleum),<br>chemically neutralized<br>neavy paraffinic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>reating process<br>to remove acidic<br>materials. It consists<br>oredominantly of<br>nydrocarbons having<br>carbon numbers<br>oredominantly in<br>the range of $C_{20}$<br>through $C_{50}$ , and<br>produces a finished<br>oil with a viscosity<br>of at least 100 SUS<br>at 100°F (19 cSt at<br>40°C). It contains<br>a relatively large<br>proportion of aliphatic<br>nydrocarbons.) | 649-058-00-4 | 265-127-8 | 64742-27-4 |
| Distillates (petroleum),<br>chemically neutralized<br>light paraffinic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination  | 649-059-00-X | 265-128-3 | 64742-28-5 |

| Substances   | Index Number | EC number | CAS number |
|--|--------------|-----------|------------|
| of hydrocarbons<br>produced by a<br>treating process<br>to remove acidic<br>materials. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ , and produces<br>a finished oil with<br>viscosity of at least<br>100 SUS at 100°F (19<br>cSt at 40°C).)   |              |           |            |
| Distillates (petroleum),<br>chemically neutralized<br>heavy naphthenic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination<br>of hydrocarbons<br>produced by a<br>treating process<br>to remove acidic<br>materials. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ , and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-060-00-5 | 265-135-1 | 64742-34-3 |
| Distillates (petroleum),<br>chemically neutralized<br>light napthenic;<br>Unrefined or mildly<br>refined baseoil (A<br>complex combination<br>of hydrocarbons<br>produced by a<br>treating process<br>to remove acidic<br>materials. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the   |              | 265-136-7 | 64742-35-4 |

| Substances   | Index Number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| range of $C_{15}$ through $C_{30}$ , and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19 cSt at 40°C). It contains relatively few normal paraffins.) |              |           |             |
| Erionite   | 650-012-00-0 |           | 12510-42-8  |
| Asbestos   | 650-013-00-6 |           | 132207-33-1 |
|  |              |           | 132207-32-0 |
|  |              |           | 12172-73-5  |
|  |              |           | 77536-66-4  |
|  |              |           | 77536-68-6  |
|  |              |           | 77536-67-5  |

## Carcinogenic substances of Category 2

| Substances   | Index number       | EC number | CAS number |
|--|--------------------|-----------|------------|
| Beryllium  | 004-001-00-7       | 231-150-7 | 7440-41-7  |
| beryllium compounds<br>with the exception of<br>aluminium beryllium<br>silicates | 004-002-00-2       |           |            |
| sulfallate (ISO);<br>2-chlorallyl<br>diethyldithiocarbamate                      | 006-038-00-4       | 202-388-9 | 95-06-7    |
| dimethylacarbamoyl<br>chloride   | 006-041-00-0       | 201-208-6 | 79-44-7    |
| Diazomethane   | 006-068-00-8       | 206-382-7 | 334-88-3   |
| Hydrazine  | 007-008-00-3       | 206-114-9 | 302-01-2   |
| N,N-<br>dimethylhydrazine  | 007-012-00-5       | 200-316-0 | 57-14-7    |
| 1,2-dimethylhydrazine  | 007-013-00-0       |           | 540-73-8   |
| salts of hydrazine   | 007-014-00-6       |           |            |
| hydrazobenzene; 1,2-<br>diphenylhydrazine  | 007-021-00-4       | 204-563-5 | 122-66-7   |
| hydrazine bis(3-<br>carboxy-4-<br>hydroxybenzensulfonat                          | 007-022-00-X<br>e) | 405-030-1 |            |

| Substances   | Index number            | EC number                    | CAS number                |
|--|-------------------------|------------------------------|---------------------------|
| hexamethylphosphoric<br>triamide;<br>hexamethylphosphoram  |                         | 211-653-8                    | 680-31-9                  |
| dimethyl sulphate  | 016-023-00-4            | 201-058-1                    | 77-78-1                   |
| diethyl sulphate   | 016-027-00-6            | 200-589-6                    | 64-67-5                   |
| 1,3-propanesultone   | 016-032-00-3            | 214-317-9                    | 1120-71-4                 |
| limethylsulfamoylchlor   | ri <b>d</b> &6-033-00-9 | 236-412-4                    | 13360-57-1                |
| Potassium dichromate   | 024-002-00-6            | 231-906-6                    | 7778-50-9                 |
| Ammonium<br>lichromate   | 024-003-00-1            | 232-143-1                    | 7789-09-5                 |
| Sodium dichromate  | 024-004-00-7            | 234-190-3                    | 10588-01-9                |
| Sodiumdichromate,<br>lihydrate   | 024-004-01-4            | 234-190-3                    | 7789-12-0                 |
| Chromyl dichloride;<br>chromic oxychloride   | 024-005-00-2            | 239-056-8                    | 14977-61-8                |
| Potassium chromate   | 024-006-00-8            | 232-140-5                    | 7789-00-6                 |
| calcium chromate   | 024-008-00-9            | 237-366-8                    | 13765-19-0                |
| strontium chromate   | 024-009-00-4            | 232-142-6                    | 7789-06-2                 |
| chromium III<br>chromate; chromic<br>chromate  | 024-010-00-X            | 246-356-2                    | 24613-89-6                |
| Chromium (VI)<br>compounds, with the<br>exception of barium<br>chromate and of<br>compounds specified<br>elsewhere in Annex I<br>to Directive 67/548/<br>EEC | 024-017-00-8            |                              |                           |
| potassium bromate  | 035-003-00-6            | 231-829-8                    | 7758-01-2                 |
| admium oxide   | 048-002-00-0            | 215-146-2                    | 1306-19-0                 |
| admium chloride  | 048-008-00-3            | 233-296-7                    | 10108-64-2                |
| admium sulphate  | 048-009-00-9            | 233-331-6                    | 10124-36-4                |
| butane [1] and<br>sobutane [2]<br>containing >= 0.1%<br>butadiene (203-450-8))   | 601-004-01-8            | 203-448-7[1]<br>200-857-2[2] | 106-97-8[1]<br>75-28-5[2] |
| 1,3-butadiene;<br>puta-1,3-diene   | 601-013-00-X            | 203-450-8                    | 106-99-0                  |
| benzo[a]pyrene;<br>benzo[d,e,f]chrysene  | 601-032-00-3            | 200-028-5                    | 50-32-8                   |

| Substances   | Index number         | EC number | CAS number |
|--|----------------------|-----------|------------|
| benzo[a]anthracene                                       | 601-033-00-9         | 200-280-6 | 56-55-3    |
| benzo[b]fluoranthene;<br>benzo[e]acephenanthry           | 601-034-00-4<br>lene | 205-911-9 | 205-99-2   |
| benzo[j]fluoranthene                                     | 601-035-00-X         | 205-910-3 | 205-82-3   |
| penzo[k]fluoranthene                                     | 601-036-00-5         | 205-916-6 | 207-08-9   |
| libenz[a,h]anthracene                                    | 601-041-00-2         | 200-181-8 | 53-70-3    |
| 1,2-dibromoethane;<br>ethylene dibromide                 | 602-010-00-6         | 203-444-5 | 106-93-4   |
| 1,2-dichloroethane;<br>ethylene dichloride               | 602-012-00-7         | 203-458-1 | 107-06-2   |
| 1,2-dibromo-3-<br>chloropropane                          | 602-021-00-6         | 202-479-3 | 96-12-8    |
| Bromoethylene  | 602-024-00-2         | 209-800-6 | 593-60-2   |
| α,α,α-trichlorotoluene;<br>benzotrichloride              | 602-038-00-9         | 202-634-5 | 98-07-7    |
| 1,3-dichloro-2-<br>propanol                              | 602-064-00-0         | 202-491-9 | 96-23-1    |
| hexachlorobenzene  | 602-065-00-6         | 204-273-9 | 118-74-1   |
| 1,4-dichlorobut-2-ene                                    | 602-073-00-X         | 212-121-8 | 764-41-0   |
| ethylene oxide;<br>oxirane                               | 603-023-00-X         | 200-849-9 | 75-21-8    |
| 1-chloro-2,3-<br>epoxypropane;<br>epichlorhydrin         | 603-026-00-6         | 203-439-8 | 106-89-8   |
| propylene oxide;<br>1,2-epoxypropane;<br>methyloxirane   | 603-055-00-4         | 200-879-2 | 75-56-9    |
| styrene oxide,<br>(epoxyethyl) benzene;<br>phenyloxirane | 603-084-00-2         | 202-476-7 | 96-09-3    |
| 4-amino-3-<br>fluorophenol                               | 604-028-00-X         | 402-230-0 | 399-95-1   |
| 5-Allyl-1,3-<br>benzodioxole; safrole                    | 605-020-00-9         | 202-345-4 | 94-59-7    |
| 3-propanolide; 1,3-<br>propiolactone                     | 606-031-00-1         | 200-340-1 | 57-57-8    |
| urethane(INN); ethyl<br>carbamate                        | 607-149-00-6         | 200-123-1 | 51-79-6    |
| methyl<br>acrylamidomethoxyace                           | 607-190-00-X<br>tate | 401-890-7 | 77402-03-0 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| (containing $\geq 0.1\%$ acrylamide)  |              |           |            |
| methyl<br>acrylamidoglycolate<br>(containing >= 0.1%<br>acrylamide)   | 607-210-00-7 | 403-230-3 | 77402-05-2 |
| Acrylonitrile   | 608-003-00-4 | 203-466-5 | 107-13-1   |
| 2-nitropropane  | 609-002-00-1 | 201-209-1 | 79-46-9    |
| 5-nitroacenaphthene   | 609-037-00-2 | 210-025-0 | 602-87-9   |
| 2-nitronaphthalene  | 609-038-00-8 | 209-474-5 | 581-89-5   |
| -nitrobiphenyl  | 609-039-00-3 | 202-204-7 | 92-93-3    |
| itrofen (ISO); 2,4-<br>lichlorophenyl 4-<br>itrophenyl ether  | 609-040-00-9 | 217-406-0 | 1836-75-5  |
| 2-nitroanisole  | 609-047-00-7 | 202-052-1 | 91-23-6    |
| nethyl-ONN-<br>zoxymethyl acetate;<br>nethyl azoxy methyl<br>icetate  | 611-004-00-2 | 209-765-7 | 592-62-1   |
| disodium (5-[(4'-<br>(2,6-hydroxy-3-<br>(2-hydroxy-5-<br>sulphophenyl)azo)pher<br>biphenyl)-4-<br>/l)azo[salicylato(4-))cu<br>2-); CI Direct Brown<br>95        |              | 240-221-1 | 16071-86-6 |
| l-o-tolylazo-<br>o-toluidine; 4-<br>umino-2', 3-<br>limethylazobenzene;<br>ast garnet GBC<br>oase; AAT; o-<br>uminoazotoluene                                   | 611-006-00-3 | 202-591-2 | 97-56-3    |
| l-aminoazobenzene   | 611-008-00-4 | 200-453-6 | 60-09-3    |
| Benzidine based<br>azo dyes; 4,4'-<br>liarylazobiphenyl<br>lyes, with the<br>exception of those<br>specified elsewhere in<br>Annex I to Directive<br>57/548/EEC | 611-024-00-1 |           |            |
| Disodium 4-   | 611-025-00-7 | 217-710-3 | 1937-37-7  |
| amino 3-[[4'-[2,4-  | 011 025 00 / | 217 /10 5 | 1)5/ 5/ /  |

| Substances   | Index number        | EC number    | CAS number |
|--|---------------------|--------------|------------|
| diaminophenyl)azo]<br>[1,1'-biphenyl]-4-<br>yl]azo]-5-hydroxy-6-<br>(phenylazo)naphtalene-<br>disulphonate; C.I.<br>Direct Black 38            | -2,7-               |              |            |
| Tetrasodium 3,3'-<br>[[1,1'-biphenyl]-4,4'-<br>dylbis(azo)]bis[5-<br>amino-4-<br>hydroxynaphthalene-2,<br>disulphonate]: C.I.<br>Direct Blue 6 | 611-026-00-2<br>7-  | 220-012-1    | 2602-46-2  |
| Disodium 3,3'-[[1,1'-<br>biphenyl)-4,4'dylbis(az<br>aminonaphthalene-1-<br>sulphonate); C.I.<br>Direct Red 28                                  |                     | 209-358-4    | 573-58-0   |
| 2-methoxyaniline; o-<br>anisidine  | 612-035-00-4        | 201-963-1(o) | 90-04-0    |
| 3,3'-<br>dimethoxybenzidine;<br>o-dianisidine  | 612-036-00-X        | 204-355-4    | 119-90-4   |
| salts of 3,3'-<br>dimethoxybenzidine;<br>salts of o-dianisidine  | 612-037-00-5        |              |            |
| 3,3'-<br>dimethylbenzidine; o-<br>tolidine   | 612-041-00-7        | 204-358-0    | 119-93-7   |
| 4,4'-<br>diaminodiphenylmetha<br>4,4'-<br>methylenedianiline   | 612-051-00-1<br>ne; | 202-974-4    | 101-77-9   |
| 3,3'-dichlorobenzidine;<br>3,3'-<br>dichlorobiphenyl-4,4'-<br>ylenediamine   | 612-068-00-4        | 202-109-0    | 91-94-1    |
| salts of 3,3'-<br>dichlorobenzidine;<br>salts of 3,3'-<br>dichlorobiphenyl-4,4'-<br>ylenediamine   | 612-069-00-X        |              |            |
| N-<br>nitrosodimethylamine;<br>dimethylnitrosamine   | 612-077-00-3        | 200-549-8    | 62-75-9    |

| Substances  | Index number                | EC number | CAS number |
|---|-----------------------------|-----------|------------|
| 2,2'-dichloro-4,4'-<br>nethylenedianiline;<br>4,4'-methylene bis(2-<br>chloroaniline)   | 612-078-00-9                | 202-918-9 | 101-14-4   |
| salts of 2,2'-<br>dichloro-4,4-<br>nethylenedianiline;<br>salts of 4,4'-<br>nethylenebis (2-<br>chloroaniline)                                      | 612-079-00-4                |           |            |
| salts of 3,3'-<br>dimethylbenzidine;<br>salts of o-toluidine  | 612-081-00-5                |           |            |
| 1-methyl-3-nitro-1-<br>nitrosoguanidine   | 612-083-00-6                | 200-730-1 | 70-25-7    |
| 4,4'-methylenedi-o-<br>coluidine  | 612-085-00-7                | 212-658-8 | 838-88-0   |
| 2,2'-(nitrosoimino)<br>pisethanol   | 612-090-00-4                | 214-237-4 | 1116-54-7  |
| o-toluidine   | 612-091-00-X                | 202-429-0 | 95-53-4    |
| itrosodipropylamine   | 612-098-00-8                | 210-698-0 | 621-64-7   |
| l-methyl-m-<br>bhenylenediamine   | 612-099-00-3                | 202-453-1 | 95-80-7    |
| Foluene-2,4-<br>liammonium sulphate   | 612-126-00-9                | 265-697-8 | 65321-67-7 |
| ethyleneimine;<br>aziridine   | 613-001-00-1                | 205-793-9 | 151-56-4   |
| 2-methylaziridine;<br>propyleneimine  | 613-033-00-6                | 200-878-7 | 75-55-8    |
| captafol (ISO);<br>1,2,3,6-tetrahydro-<br>N-(1,1,2,2-<br>tetrachloroethylthio)<br>phthalimide   | 613-046-00-7                | 219-363-3 | 2425-06-1  |
| carbadox (INN);<br>methyl 3-<br>(quinoxalin-2-<br>ylmethylene) carbazate<br>1,4-dioxide; 2-<br>(methoxycarbonylhydra<br>quinoxaline 1,4-<br>dioxide | 613-050-00-9<br>zonomethyl) | 229-879-0 | 6804-07-5  |
| acrylamide  | 616-003-00-0                | 201-173-7 | 79-06-1    |
| hioacetamide  | 616-026-00-6                | 200-541-4 | 62-55-5    |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| Distillates (coal tar),<br>benzole fraction;<br>Light Oil (A complex<br>combination of<br>hydrocarbons obtained<br>by the distillation of<br>coal tar. It consists of<br>hydrocarbons having<br>carbon numbers<br>primarily in the<br>range of C <sub>4</sub> to C <sub>10</sub><br>and distilling in the<br>approximate range of<br>$80^{\circ}$ C to $160^{\circ}$ C ( $175^{\circ}$ F<br>to $320^{\circ}$ F).) | 648-001-00-0 | 283-482-7 | 84650-02-2  |
| Tar oils, brown-<br>coal; Light Oil (The<br>distillate from lignite<br>tar boiling in the range<br>of approximately<br>80°C to 250°C<br>(176°F to 482°F).<br>Composed primarily<br>of aliphatic and<br>aromatic hydrocarbons<br>and monobasic<br>phenols.)  | 648-002-00-6 | 302-674-4 | 94114-40-6  |
| Benzol forerunnings<br>(coal); Light Oil<br>Redistillate, low<br>boiling (The distillate<br>from coke oven<br>light oil having<br>an approximate<br>distillation range<br>below 100°C (212°F).<br>Composed primarily<br>of $C_4$ to $C_6$ aliphatic<br>hydrocarbons.)   | 648-003-00-1 | 266-023-5 | 65996-88-5  |
| Distillates (coal tar),<br>benzole fraction,<br>BTX-rich; Light<br>Oil redistillate, low<br>boiling (A residue<br>from the distillation<br>of crude benzole<br>to remove benzole<br>fronts. Composed<br>primarily of benzene,<br>toluene and xylenes  | 648-004-00-7 | 309-984-9 | 101896-26-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| boiling in the range of<br>approximately 75°C<br>to 200°C (167°F to<br>392°F).)  |              |           |            |
| Aromatic<br>hydrocarbons, C <sub>6</sub> _<br><sub>10</sub> , C <sub>8</sub> -rich; Light Oil<br>redistillate, low boiling   | 648-005-00-2 | 292-697-5 | 90989-41-6 |
| Solvent naphtha<br>(coal), light; Light Oil<br>redistillate, low boiling   | 648-006-00-8 | 287-498-5 | 85536-17-0 |
| Solvent naphtha (coal),<br>xylene-styrene cut;<br>Light Oil redistillate,<br>intermediate boiling  | 648-007-00-3 | 287-502-5 | 85536-20-5 |
| Solvent naphtha<br>(coal), coumarone-<br>Styrene contg.;<br>Light Oil redistillate,<br>intermediate boiling  | 648-008-00-9 | 287-500-4 | 85536-19-2 |
| Naphtha (coal), distn.<br>Residues; Light Oil<br>redistillate, high<br>boiling (The residue<br>remaining from<br>the distillation of<br>recovered naphtha.<br>Composed primarily<br>of naphthalene and<br>condensation products<br>of indene and styrene.)                                 | 648-009-00-4 | 292-636-2 | 90641-12-6 |
| Aromatic<br>hydrocarbons, C <sub>8</sub> ;<br>Light Oil redistillate,<br>high boiling  | 648-010-00-X | 292-694-9 | 90989-38-1 |
| Aromatic<br>hydrocarbons, C <sub>8</sub><br>9 hydrocarbon resin<br>polymn. by-product;<br>Light Oil Redistillate,<br>high boiling (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>evaporation of<br>solvent under vacuum<br>from polymerized<br>hydrocarbon resin. It | 648-012-00-0 | 295-281-1 | 91995-20-9 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| onsists predominantly<br>f aromatic<br>ydrocarbons having<br>arbon numbers<br>redominantly in the<br>ange of $C_8$ through<br>$C_9$ and boiling in the<br>ange of appoximately<br>20°C to 215°C<br>248°F to 419°F).)   |              |           |             |
| romatic<br>ydrocarbons, C <sub>9—12</sub> ,<br>enzene distn.; Light<br>Dil redistillate, high<br>oiling  | 648-013-00-6 | 295-551-9 | 92062-36-7  |
| extract residues (coal),<br>enzole fraction alk.,<br>cid ext.; Light Oil<br>extract Residues,<br>bw boiling (The<br>edistillate from the<br>istillate, freed of tar<br>cids and tar bases,<br>rom bituminous coal<br>igh temperature<br>ar boiling in the<br>pproximate range of<br>0°C to 160°C (194°F<br>o 320°F). It consists<br>redominantly of<br>enzene, toluene and<br>ylenes.)   | 648-014-00-1 | 295-323-9 | 91995-61-8  |
| xtract residues (coal<br>r), benzole fraction<br>k., acd ext.; Light Oil<br>stract residues, low<br>biling (A complex<br>biling (A comp | 648-015-00-7 | 309-868-8 | 101316-63-6 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| of 85°C-195°C   |              |           |             |
| (185°F-383°F).)<br>Extract residues<br>(coal) benzole<br>fraction acid; Light<br>oil extract residues,<br>low boiling (An acid<br>sludge by-product<br>of the sulphuric acid<br>refining of crude high<br>temperature coal.<br>Composed primarily<br>of sulphuric acid and  | 648-016-00-2 | 298-725-2 | 93821-38-6  |
| organic compounds.)<br>Extract residues (coal),<br>light oil alk., distn.<br>Overheads; Light<br>Oil extract residues,<br>low boiling (The first<br>fraction from the<br>distillation of aromatic<br>hydrocarbons,<br>coumarone,<br>naphthalene<br>and indene rich<br>prefactionator bottoms<br>or washed carbolic oil<br>boiling substantially<br>below 145°C<br>(293°F). Composed<br>primarily of C <sub>7</sub> and C <sub>8</sub><br>aliphatic and aromatic<br>hydrocarbons.) | 648-017-00-8 | 292-625-2 | 90641-02-4  |
| Extract residues (coal),<br>light oil alk., acid ext.,<br>indene fraction; Light<br>Oil Extract Residues,<br>intermediate boiling   | 648-018-00-3 | 309-867-2 | 101316-62-5 |
| Extract residues<br>(coal), light oil alk.,<br>indene naphtha<br>fraction; Light Oil<br>Extract Residues, high<br>boiling (The distillate<br>from aromatic<br>hydrocarbons,<br>coumarone,<br>naphthalene<br>and indene rich<br>prefractionator  | 648-019-00-9 | 292-626-8 | 90641-03-5  |
|   |              | 20        |             |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| bottoms or washed<br>carbolic oils, having<br>an approximate<br>boiling range of<br>155°C to 180°C<br>(311°F to 356°F).<br>Composed primarily<br>of indene, indan and<br>trimethylbenzenes.)  |              |           |             |
| Solvent naphtha<br>(coal); Light Oil<br>extract residues,<br>high boiling (The<br>distillate from either<br>high temperature coal<br>tar, coke oven light<br>oil, or coal tar oil<br>alkaline extract residue<br>having an approximate<br>distillation range<br>of 130°C to 210°C<br>(266°F to 410°F)<br>Composed primarily<br>of indene and other<br>polycyclic ring<br>systems containing<br>a single aromatic<br>ring. May contain<br>phenolic compounds<br>and aromatic nitrogen<br>bases.) | 648-020-00-4 | 266-013-0 | 65996-79-4  |
| Distillates (coal tar),<br>light oils, neutral<br>fraction; Light Oil<br>extract residues,<br>high boiling (A<br>Distillate from the<br>fractional distillation<br>of high temperature<br>coal tar. Composed<br>primarily of alkyl-<br>substituted one ring<br>aromatic hydrocarbons<br>boiling in the range of<br>approximately 135°C<br>to 210°C (275°F to<br>410°F). May also<br>include unsaturated<br>hydrocarbons   | 648-021-00-X | 309-971-8 | 101794-90-5 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| such as indene and coumarone.)   |              |           |            |
| Distillates (coal tar),<br>light oils, acid exts.;<br>Light oil extract<br>residues, high boiling<br>(This oil is a complex<br>mixture of aromatic<br>hydrocarbons,<br>primarily indene,<br>naphthalene,<br>coumarone, phenol<br>and o-, m- and p-<br>cresol and boiling in<br>the range of 140°C<br>to 215°C (284°F to<br>419°F).)                      | 648-022-00-5 | 292-609-5 | 90640-87-2 |
| Distillates (coal tar),<br>light oils; Carbolic<br>Oil (A complex<br>combination of<br>hydrocarbons obtained<br>by distillation of<br>coal tar. It consists<br>of aromatic and<br>other hydrocarbons,<br>phenolic compounds<br>and aromatic nitrogen<br>compounds and distills<br>at the approximate<br>range of 150°C to<br>210°C (302°F to<br>410°F).) | 648-023-00-0 | 283-483-2 | 84650-03-3 |
| Tar oils, coal; Carbolic<br>Oil (The distillate<br>from high temperature<br>coal tar having<br>an approximate<br>distillation range<br>of 130°C to 250°C<br>(266°F to 410°F).<br>Composed primarily<br>of naphthalene,<br>alkylnaphthalenes,<br>phenolic compounds,<br>and aromatic nitrogen<br>bases.)  | 648-024-00-6 | 266-016-7 | 65996-82-9 |
| Extract residues (coal),<br>light oil alk., acid<br>ext.; Carbolic Oil   | 648-026-00-7 | 292-624-7 | 90641-01-3 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| extract residue (The<br>oil resulting from the<br>acid washing of alkali-<br>washed carbolic oil<br>to remove the minor<br>amounts of basic<br>compounds (tar bases).<br>Composed primarily<br>of indene, indan and<br>alkylbenzenes.)  |              |           |            |
| Extract residues<br>(coal), tar oil alk.;<br>Carbolic Oil extract<br>residue (The residue<br>obtained from coal<br>tar oil by an alkaline<br>wash such as aqueous<br>sodium hydroxide<br>after the removal of<br>crude coal tar acids.<br>Composed primarily<br>of naphthalenes and<br>aromatic nitrogen<br>bases.) | 648-027-00-2 | 266-021-4 | 65996-87-4 |
| Extract oils (coal),<br>light oil; Acid extract<br>(The aqueous extract<br>produced by an<br>acidic wash of alkali-<br>washed carbolic oil.<br>Composed primarily<br>of acid salts of various<br>aromatic nitrogen<br>bases including<br>pyridine, quinoline and<br>their alkyl derivatives.)                       | 648-028-00-8 | 292-622-6 | 90640-99-6 |
| Pyridine, alkyl derivs.;<br>Crude tar bases (The<br>complex combination<br>of polyalkylated<br>pyridines derived<br>from coal tar<br>distillation or as high-<br>boiling distillates<br>approximately above<br>150°C (302°F)<br>from the reaction<br>of ammonia with<br>acetaldehyde,                               | 648-029-00-3 | 269-929-9 | 68391-11-7 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| formaldehyde or   | Index number | EC number | CAS number |
| paraformaldehyde.)  |              |           |            |
| Tar bases, coal,<br>picoline fraction;<br>Distillate bases<br>(Pyridine bases<br>boiling in the range of<br>approximately 125°C<br>to 160°C (257°F<br>to 320°F) obtained<br>by distillation of<br>neutralized acid extract<br>of the base-containing<br>tar fraction obtained<br>by the distillation of<br>bituminous coal tars.<br>Composed chiefly<br>of lutidines and<br>picolines.) | 648-030-00-9 | 295-548-2 | 92062-33-4 |
| Tar bases, coal,<br>lutidine fraction;<br>Distillate Bases  | 648-031-00-4 | 293-766-2 | 91082-52-9 |
| Extract oils (coal),<br>tar base, collidine<br>fraction; Distillate<br>Bases (The extract<br>produced by the<br>acid extraction of<br>bases from crude<br>coal tar aromatic oils,<br>neutralization, and<br>distillation of the<br>bases. Composed<br>primarily of collidines,<br>aniline, toluidines,<br>lutidines, xylidines.)  | 648-032-00-X | 273-077-3 | 68937-63-3 |
| Tar bases, coal,<br>collidine fraction;<br>Distillate bases (The<br>distillation fraction<br>boiling in the range of<br>approximately 181°C<br>to 186°C (356°F<br>to 367°F) from the<br>crude bases obtained<br>from the neutralized,<br>acid-extracted<br>base-containing tar<br>fractions obtained<br>by the distillation of  | 648-033-00-5 | 295-543-5 | 92062-28-7 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| bituminous coal tar.<br>It contains chiefly<br>aniline and collidines.)   |              |           |            |
| Tar bases, coal,<br>aniline fraction;<br>Distillate bases (The<br>distillation fraction<br>boiling in the range of<br>approximately 180°C<br>to 200°C (356°F<br>to 392°F) from the<br>crude bases obtained<br>by dephenolating<br>and debasing the<br>carbolated oil from<br>the distillation of<br>coal tar. It contains<br>chiefly aniline,<br>collidines, lutidines<br>and toluidines.)  | 648-034-00-0 | 295-541-4 | 92062-27-6 |
| Tar bases, coal,<br>toluidine fraction;<br>Distillate bases   | 648-035-00-6 | 293-767-8 | 91082-53-0 |
| Distillates (petroleum),<br>alkene-alkyene manuf.<br>pyrolysis oil, mixed<br>with high-temp. coal<br>tar, indene fraction;<br>Redistillates (A<br>complex combination<br>of hydrocarbons<br>obtained as a<br>redistillate from the<br>fractional distillation<br>of bituminous coal<br>high temperature<br>tar and residual oils<br>that are obtained<br>by the pyrolytic<br>production of alkenes<br>and alkynes from<br>petroleum products<br>or natural gas. It<br>consists predominantly<br>of indene and<br>boils in a range of<br>approximately 160°C<br>to 190°C (320°F to<br>374°F).) | 648-036-00-1 | 295-292-1 | 91995-31-2 |

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| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| Distillates (coal), coal<br>tar-residual pyrolysis<br>oils, napthalene<br>oils, Redistillates<br>(The redistillate<br>obtained from the<br>fractional distillation<br>of bituminous coal<br>high temperature<br>tar and pyrolysis<br>residual oils and<br>boiling in the range<br>of approximately<br>190°C to 270°C<br>(374°F to 518°F).<br>Composed primarily<br>of substituted<br>dinuclear aromatics.)   | 648-037-00-7 | 295-295-8 | 91995-35-6  |
| Extract oils (coal),<br>coal tar-residual<br>pyrolysis oils,<br>naphthalene<br>oil, redistillate;<br>Redistillates (The<br>redistillate from the<br>fractional distillation<br>of dephenolated<br>and debased<br>methylnaphthalene<br>oil obtained from<br>bituminous coal high<br>temperature tar and<br>pyrolysis residual<br>oils boiling in the<br>approximate range<br>of 220°C to 230°C<br>(428°F to 446°F). It<br>consists predominantly<br>of unsubstituted<br>and substituted<br>dinuclear aromatic<br>hydrocarbons.) | 648-038-00-2 | 295-329-1 | 91995-66-3  |
| Extract oils (coal),<br>coal tar-residual<br>pyrolysis oils,<br>naphthalene oils;<br>Redistillates (A<br>neutral oil obtained<br>by debasing and<br>dephenolating the  | 648-039-00-8 | 310-170-0 | 122070-79-5 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| oil obtained from<br>the distillation of<br>high temperature<br>tar and pyrolysis<br>residual oils which<br>has a boiling range<br>of 225°C to 255°C<br>(437°F to 491°F).<br>Composed primarily<br>of substituted<br>dinuclear aromatic<br>hydrocarbons.)  |              |           |             |
| Extract oils (coal),<br>coal tar-residual<br>pyrolysis oils,<br>naphthalene oil,<br>distn. residues;<br>Redistillates (Residue<br>from the distillation<br>of dephenolated<br>and debased<br>methylnaphthalene<br>oil (from bituminous<br>coal tar and pyrolysis<br>residual oils) with<br>a boiling range of<br>240°C to 260°C<br>(464°F to 500°F).<br>Composed primarily<br>of substituted<br>dinuclear aromatic<br>and heterocyclic<br>hydrocarbons.) | 648-040-00-3 | 310-171-6 | 122070-80-8 |
| Absorption oils,<br>bicyclo arom.<br>and heterocyclic<br>hydrocarbon fraction;<br>Wash oil redistillate (A<br>complex combination<br>of hydrocarbons<br>obtained as a<br>redistillate from<br>the distillation of<br>wash oil. It consists<br>predominantly of<br>2-ringed aromatic<br>and heterocyclic<br>hydrocarbons boiling<br>in the range of<br>approximately 260°C  | 648-041-00-9 | 309-851-5 | 101316-45-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| to 290°C (500°F to<br>554°F).)  |              |           |            |
| Distillates (coal tar),<br>upper, fluorene-rich;<br>Wash oil redistillate (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>crystallization of<br>tar oil. It consists<br>of aromatic<br>and polycyclic<br>hydrocarbons<br>primarily fluorene and<br>some acenaphthene.)                                   | 648-042-00-4 | 284-900-0 | 84989-11-7 |
| Creosote oil,<br>acenaphthene fraction,<br>acenaphthene-free;<br>Wash oil redistillate<br>(The oil remaining<br>after removal by a<br>crystallization process<br>of acenaphthene<br>from acenaphthene<br>oil from coal tar.<br>Composed primarily<br>of naphthalene and<br>alkylnaphthalenes.)                              | 648-043-00-X | 292-606-9 | 90640-85-0 |
| Distillates (coal<br>tar), heavy oils;<br>Heavy anthracene<br>oil (Distillate from<br>the fractional<br>distillation of coal tar<br>of bituminous coal,<br>with boiling range<br>of 240°C to 400°C<br>(464°F to 752°F).<br>Composed primarily<br>of tri- and polynuclear<br>hydrocarbons<br>and heterocyclic<br>compounds.) | 648-044-00-5 | 292-607-4 | 90640-86-1 |
| Anthracene oil, acid<br>ext.; Anthracene oil<br>extract residue (A<br>complex combination<br>of hydrocarbons<br>from the base-freed<br>fraction obtained from   | 648-046-00-6 | 295-274-3 | 91995-14-1 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| the distillation of<br>coal tar and boiling<br>in the range of<br>approximately 325°C<br>to 365°C (617°F to<br>689°F). It contains<br>predominantly<br>anthracene and<br>phenanthrene and their<br>alkyl derivatives.)   |              |           |             |
| Distillates (coal tar);<br>Heavy anthracene<br>oil (The distillate<br>from coal tar having<br>an approximate<br>distillation range<br>of 100°C to 450°C<br>(212°F to 842°F).<br>Composed primarily<br>of two to four<br>membered condensed<br>ring aromatic<br>hydrocarbons,<br>phenolic compounds,<br>and aromatic nitrogen<br>bases.)  | 648-047-00-1 | 266-027-7 | 65996-92-1  |
| Distillates (coal tar),<br>pitch, heavy oils;<br>Heavy anthracene<br>oil (The distillate<br>from the distillation<br>of the pitch obtained<br>from bituminous<br>high temperature<br>tar. Composed<br>primarily of tri-and<br>polynuclear aromatic<br>hydrocarbons and<br>boiling in the range of<br>approximately 300°C<br>to 470°C (572°F to<br>878°F). The product<br>may also contain<br>heteroatoms.) | 648-048-00-7 | 295-312-9 | 91995-51-6  |
| Distillates (coal<br>tar), pitch; Heavy<br>anthracene oil (The<br>oil obtained from<br>condensation of the<br>vapors from the heat   | 648-049-00-2 | 309-855-7 | 101316-49-8 |

| Substances   | Index number | EC number | CAS number |
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| treatment of pitch.<br>Composed primarily<br>of two- to four-ring<br>aromatic compounds<br>boiling in the range<br>of 200°C to greater<br>than 400°C (392°F to<br>greater than 752°F).)  |              |           |            |
| Distillates (coal<br>tar), heavy oils,<br>pyrene fraction;<br>Heavy anthracene<br>oil redistillate (The<br>redistillate obtained<br>from the fractional<br>distillation of pitch<br>distillate boiling<br>in the range of<br>approximately 350°C<br>to 400°C (662°F to<br>752°F). Consists<br>predominantly of<br>tri-and polynuclear<br>aromatic and<br>heterocyclic<br>hydrocarbons.)    | 648-050-00-8 | 295-304-5 | 91995-42-5 |
| Distillates (coal tar),<br>pitch, pyrene fraction;<br>Heavy anthracene<br>oil redistillate (The<br>redistillate obtained<br>from the fractional<br>distillation of pitch<br>distillate and boiling<br>in the range of<br>approximately 380°C<br>to 410°C (716°F to<br>770°F). Composed<br>primarily of tri-<br>and polynuclear<br>aromatic hydrocarbons<br>and heterocyclic<br>compounds.) | 648-051-00-3 | 295-313-4 | 91995-52-7 |
| Paraffin waxes (coal),<br>brown-coal high-<br>temp. tar, carbon-<br>treated; Coal tar<br>extract (A complex<br>combination of<br>hydrocarbons obtained   | 648-052-00-9 | 308-296-6 | 97926-76-6 |

| Substances   | Index number                 | EC number              | CAS number               |
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| by the treatment of lignite carbonization tar with activated carbon for removal of trace constituents and impurities. It consists predominantly of saturated straight and branched chain hydro-carbons having carbon numbers predominantly greater than $C_{12}$ .)  |                              |                        |                          |
| Paraffin waxes (coal),<br>brown-coal high-temp.<br>tar, carbon-treated;<br>Coal tar extract (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of lignite<br>carbonization tar with<br>bentonite for removal<br>of trace constituents<br>and impurities. It<br>consists predominantly<br>of saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .) | 648-053-00-4                 | 308-297-1              | 97926-77-7               |
| Pitch; Pitch<br>Pitch, coal tar, high<br>temp.; Pitch (The<br>residue from the<br>distillation of high<br>temperature coal<br>tar. A black solid<br>with an approximate<br>softening point<br>from 30°C to 180°C<br>(86°F to 356°F).<br>Composed primarily<br>of a complex mixture<br>of three or more<br>membered condensed<br>ring aromatic<br>hydrocarbons.)  | 648-054-00-X<br>648-055-00-5 | 236-072-4<br>266-028-2 | 61789-60-4<br>65996-93-2 |

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| Substances   | Index number | EC number | CAS number  |
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| Pitch, coal tar, high<br>temp.; heat-treated;<br>Pitch (The heat treated<br>residue from the<br>distillation of high<br>temperature coal<br>tar. A black solid<br>with an approximate<br>softening point<br>from 80°C to 180°C<br>(176°F to 356°F).<br>Composed primarily<br>of a complex mixture<br>of three or more<br>membered condensed<br>ring aromatic<br>hydrocarbons.)   | 648-056-00-0 | 310-162-7 | 121575-60-8 |
| Pitch, coal tar, high<br>temp., secondary;<br>Pitch redistillate (The<br>residue obtained<br>during the distillation<br>of high boiling<br>fractions from<br>bituminous coal high<br>temperature tar and/<br>or pitch coke oil,<br>with a softening point<br>of 140°C to 170°C<br>(284°F to 392°F)<br>according to DIN<br>52025. Composed<br>primarily of tri-and<br>polynuclear aromatic<br>compounds which also<br>contain heteroatoms.) | 648-057-00-6 | 302-650-3 | 94114-13-3  |
| Residues (coal tar),<br>pitch distn.; Pitch<br>redistillate (Residue<br>from the fractional<br>distillation of pitch<br>distillate boiling<br>in the range of<br>approximately 400°C<br>to 470°C (752°F to<br>846°F). Composed<br>primarily of<br>polynuclear aromatic<br>hydrocarbons,  | 648-058-00-1 | 295-507-9 | 92061-94-4  |

| Substances   | Index number | EC number | CAS number  |
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| and heterocyclic compounds.)   |              |           |             |
| Tar, coal, high-temp.,<br>distn. and storage<br>residues; Coal tar<br>solids residue (Coke-<br>and ash-containing<br>solid residues that<br>separate on distillation<br>and thermal treatment<br>of bituminous coal<br>high temperature<br>tar in distillation<br>installations<br>and storage<br>vessels. Consists<br>predominantly of<br>carbon and contains a<br>small quantity of hero<br>compounds as well as<br>ash components.) | 648-059-00-7 | 295-535-1 | 92062-20-9  |
| Tar, coal, storage<br>residues; Coal tar<br>solids residue (The<br>deposit removed<br>from crude coal tar<br>storages. Composed<br>primarily of coal tar<br>and carbonaceous<br>particulate matter.)   | 648-060-00-2 | 293-764-1 | 91082-50-7  |
| Tar, coal, high-temp.,<br>residues; Coal tar<br>solids residue (Solids<br>formed during the<br>coking of bituminous<br>coal to produce crude<br>bituminous coal<br>high temperature<br>tar. Composed<br>primarily of coke<br>and coal particles,<br>highly aromatized<br>compounds and<br>mineral substances.)   | 648-061-00-8 | 309-726-5 | 100684-51-3 |
| Tar, coal, high-temp.,<br>high-solids; Coal tar<br>solids residue (The<br>condensation product<br>obtained by cooling,<br>to approximately   | 648-062-00-3 | 273-615-7 | 68990-61-4  |

| Substances   | Index number | EC number | CAS number |
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| ambient temperature,<br>the gas evolved in<br>the high temperature<br>(greater than 700°C<br>(1292°F)) destructive<br>distillation of coal.<br>Composed primarily<br>of a complex mixture<br>of condensed ring<br>aromatic hydrocarbons<br>with a high solid<br>content of coal-type<br>materials.)  |              |           |            |
| Waste solids, coal-tar<br>pitch coking; Coal tar<br>solids residue (The<br>combination of wastes<br>formed by the coking<br>of bituminous coal<br>tar pitch. It consists<br>predominantly of<br>carbon.)   | 648-063-00-9 | 295-549-8 | 92062-34-5 |
| Extract residues (coal),<br>brown; Coal tar extract<br>(The residue from<br>extraction of dried<br>coal.)  | 648-064-00-4 | 294-285-0 | 91697-23-3 |
| Paraffin waxes (coal),<br>brown-coal-high-temp.<br>tar; Coal tar extract (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>lignite carbonization<br>tar by solvent<br>crystallization (solvent<br>deoiling), by sweating<br>or an adducting<br>process. It consists<br>predominantly of<br>straight and branched<br>chain saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .) | 648-065-00-X | 295-454-1 | 92045-71-1 |
| Paraffin waxes (coal),<br>brown-coal-high-temp.<br>tar, hydrotreated;<br>Coal tar extract (A   | 648-066-00-5 | 295-455-7 | 92045-72-2 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| complex combination<br>of hydrocarbons<br>obtained from lignite<br>carbonization tar by<br>solvent crystallization<br>(solvent deoiling),<br>by sweating or an<br>adducting process<br>reated with hydrogen<br>in the presence of a<br>catalyst. It consists<br>oredominantly of<br>straight and branched<br>chain saturated<br>hydrocarbons having<br>carbon numbers<br>oredominantly greater<br>han $C_{12}$ .)  |              |           |             |
| Paraffin waxes (coal),<br>prown-coal-high-temp<br>ar, silicic acid-treated;<br>Coal tar extract (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>reatment of lignite<br>earbonization tar with<br>ilicic acid for removal<br>of trace constituents<br>and impurities. It<br>consists predominantly<br>of saturated straight<br>and branched chain<br>hydrocarbons having<br>earbon numbers<br>predominantly greater<br>han $C_{12}$ .) | 648-067-00-0 | 308-298-7 | 97926-78-8  |
| Yar, coal, low-temp.,<br>istn. residues; Tar<br>il, intermediate<br>oiling (Residues<br>rom fractional<br>istillation of low<br>emperature coal tar<br>o remove oils that<br>oil in a range up to<br>pproximately 300°C<br>572°F). Composed<br>rimarily of aromatic<br>ompounds.   | 648-068-00-6 | 309-887-1 | 101316-85-2 |

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| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Pitch, coal tar, low-<br>temp., Pitch residue (A<br>complex black solid<br>or semi-solid obtained<br>from the distillation of<br>a low temperature coal<br>tar. It has a softening<br>point within the<br>approximate range<br>of 40°C to 180°C<br>(104°F to 356°F).<br>Composed primarily<br>of a complex mixture<br>of hydrocarbons.)   | 648-069-00-1 | 292-651-4 | 90669-57-1 |
| Pitch, coal tar, low-<br>temp., oxidized; Pitch<br>residue, oxidised<br>(The product obtained<br>by air-blowing, at<br>elevated temperature,<br>tow-temperature coal<br>car pitch. It has a<br>softening-point within<br>the approximate range<br>of 70°C to 180°C<br>(158°F to 356°F).<br>Composed primarily<br>of a complex mixture<br>of hydrocarbons.)  | 648-070-00-7 | 292-654-0 | 90669-59-3 |
| Pitch, coal tar,<br>low-temp., heat-<br>reated; Pitch residue,<br>oxidised; Pitch<br>residue, heat-treated<br>(A complex black<br>solid obtained by<br>the heat treatment<br>of low temperature<br>coal tar pitch. It has<br>a softening point<br>within the approximate<br>range of 50°C to<br>140°C (122°F to<br>284°F). Composed<br>primarily of a complex<br>mixture of aromatic<br>compounds.) | 648-071-00-2 | 292-653-5 | 90669-58-2 |
| i /   |              | 269-159-3 | 68188-48-7 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| arom; Distillates<br>(The distillate from<br>a mixture of coal<br>and tar and aromatic<br>petroleum streams<br>having an approximate<br>distillation range<br>of 220°C to<br>450°C (428°F to<br>842°F). Composed<br>primarily of 3- to 4-<br>membered condensed<br>ring aromatic<br>hydrocarbons.)   |              |           |             |
| Aromatic<br>hydrocarbons, $C_{20}$<br>$_{-28}$ , polycyclic,<br>mixed coal-tar<br>pitch-polyethylene-<br>polypropylene<br>pyrolysis-derived;<br>Pyrolysis products (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>mixed coal tar<br>pitch-polyethylene-<br>polypropylene<br>pyrolysis. Composed<br>primarily of<br>polycyclic aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>20</sub> through<br>C <sub>28</sub> and having a<br>softening point of<br>100°C to 220°C<br>(212°F to 428°F)<br>according to DIN<br>52025.) | 648-073-00-3 | 309-956-6 | 101794-74-5 |
| Aromatic<br>hydrocarbons, C <sub>20</sub><br>2;, polycyclic,<br>mixed coal-tar<br>pitch-polyethylene<br>pyrolysis-derived;<br>Pyrolysis products (A<br>complex combination<br>of hydrocarbons  | 648-074-00-9 | 309-957-1 | 101794-75-6 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| obtained from<br>mixed coal tar<br>pitch-polyethylene<br>pyrolysis. Composed<br>primarily of<br>polycyclic aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{28}$ and having a<br>softening point of<br>100°C to 220°C<br>(212°F to 428°F)<br>according to DIN<br>52025.)   |              |           |             |
| Aromatic<br>hydrocarbons, $C_{20}$<br>$_{28}$ , polycyclic,<br>mixed coal-tar<br>pitch-polystyrene<br>pyrolysis-derived;<br>Pyrolysis products (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>mixed coal tar pitch-<br>polystyrene pyrolysis.<br>Composed primarily<br>of polycyclic aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>20</sub> through<br>C <sub>28</sub> and having a<br>softening point of<br>100°C to 220°C<br>(212°F to 428°F)<br>according to DIN<br>52025.) | 648-075-00-4 | 309-958-7 | 101794-76-7 |
| Pitch, coal tar-<br>petroleum; Pitch<br>residues (The residue<br>from the distillation<br>of a mixture of coal<br>tar and aromatic<br>petroleum streams. A<br>solid with a softening<br>point from 40°C to<br>180°C (140°F to   | 648-076-00-X | 269-109-0 | 68187-57-5  |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| 356°F). Composed<br>primarily of a<br>complex combination<br>of three or more<br>nembered condensed<br>ring aromatic<br>nydrocarbons.)  |              |           |             |
| Phenanthrene, distn.<br>residues; Heavy<br>anthracene oil<br>redistillate (Residue<br>from the distillation<br>of crude phenanthrene<br>poiling in the<br>approximate range<br>of 340°C to 420°C<br>(644°F to 788°F). It<br>consists predominantly<br>of phenanthrene,<br>anthracene and<br>carbazole.) | 648-077-00-5 | 310-169-5 | 122070-78-4 |
| Distillates (coal tar),<br>apper, fluorene-free;<br>Wash oil redistillate (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>crystallization of<br>ar oil. It consists of<br>aromatic polycyclic<br>nydrocarbons,<br>orimarily diphenyl,<br>dibenzofuran and<br>acenaphthene.)          | 648-078-00-0 | 284-899-7 | 84989-10-6  |
| Residues (coal tar),<br>creosote oil distn.;<br>Wash oil redistillate<br>The residue from the<br>fractional distillation<br>of wash oil boiling in<br>he approximate range<br>of 270°C to 330°C<br>(518°F to 626°F). It<br>consists predominantly<br>of dinuclear aromatic<br>and heterocyclic          | 648-080-00-1 | 295-506-3 | 92061-93-3  |
| nydrocarbons.)  |              |           |             |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| cut; Naphthalene<br>oil (The complex<br>combination of<br>hydrocarbons obtained<br>from prefractionation<br>(continuous distillation<br>of coke oven light<br>oil. It consists<br>predominantly<br>of naphthalene,<br>coumarone and indene<br>and boils above 148°C<br>(298°F).)  |              |           |             |
| Distillates (coal tar),<br>naphthalene oils,<br>naphthalene-low;<br>Naphthalene oil<br>redistillate (A complex<br>combination of<br>hydrocarbons obtained<br>by crystallization<br>of naphthalene oil.<br>Composed primarily<br>of naphthalene, alkyl<br>naphthalenes and<br>phenolic compounds.)   | 648-086-00-4 | 284-898-1 | 84989-09-3  |
| Distillates (coal<br>tar), napthalene oil<br>crystn. mother liquor;<br>Naphthalene oil<br>redistillate (A complex<br>combination of organic<br>compounds obtained<br>as a filtrate from the<br>crystallization of the<br>naphthalene fraction<br>from coal tar and<br>boiling in the range of<br>approximately 200°C<br>to 230°C (392°F<br>to 446F). Contains<br>chiefly naphthalene,<br>thionaphthene and<br>alkylnaphthalenes.) | 648-087-00-X | 295-310-8 | 91995-49-2  |
| Extract residues<br>(coal), naphthalene<br>oil, alk.; Naphthalene<br>oil extract residue (A<br>complex combination<br>of hydrocarbons   | 648-088-00-5 | 310-166-9 | 121620-47-1 |

| S-h-t   | T., J.,      | ECanada   | CAS         |
|---|--------------|-----------|-------------|
| Substances<br>obtained from the<br>alkali washing of<br>naphthalene oil to<br>remove phenolic<br>compounds (tar acids).<br>It is composed of<br>naphthalene and alkyl<br>naphthalenes.)   | Index number | EC number | CAS number  |
| Extract residues<br>(coal), naphthalene<br>oil, alk., naphthalene-<br>low; Naphthalene oil<br>extract residue (A<br>complex combination<br>of hydrocarbons<br>remaining after<br>the removal of<br>naphthalene from<br>alkali-washed<br>naphthalene oil by<br>a crystallization<br>process. It is<br>composed primarily of<br>naphthalene and alkyl<br>naphthalenes.) | 648-089-00-0 | 310-167-4 | 121620-48-2 |
| Distillates (coal tar),<br>naphthalene oils,<br>naphthalene-free, alk.<br>exts.; Naphthalene<br>oil extract residue<br>(The oil remaining<br>after the removal of<br>phenolic compounds<br>(tar acids) from<br>drained naphthalene<br>oil by an alkali wash.<br>Composed primarily<br>of naphthalene and<br>alkyl naphthalenes.)                                      | 648-090-00-6 | 292-612-1 | 90640-90-7  |
| Extract residues (coal),<br>naphthalene oil alk.,<br>distn. overheads;<br>Naphthalene oil<br>extract residue<br>(The distillation<br>from alkali-washed<br>naphthalene oil having<br>an approximate<br>distillation range<br>of 180°C to 220°C  | 648-091-00-1 | 292-627-3 | 90641-04-6  |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| (356°F to 428°F).<br>Composed primarily<br>of naphthalene,<br>alkylbenzenes, indene<br>and indan.)   |              |           |             |
| Distillates (coal tar),<br>naphthalene oils,<br>methylnaphthalene<br>fraction;<br>Methylnaphthalene<br>oil (A distillate<br>from the fractional<br>distillation of high<br>temperature coal tar.<br>Composed primarily<br>of substituted two ring<br>aromatic hydrocarbons<br>and aromatic nitrogen<br>bases boiling<br>in the range of<br>approximately 225°C<br>to 255°C (437°F to<br>491°F).) | 648-092-00-7 | 309-985-4 | 101896-27-9 |
| Distillates (coal<br>tar), naphthalene<br>oils, indole-<br>methylnaphthalene<br>fraction;<br>Methylnaphthalene oil<br>(A distillate from the<br>fractional distillation<br>of high temperature<br>coal tar. Composed<br>primarily of indole and<br>methylnaphthalene<br>boiling in the range of<br>approximately 235°C<br>to 255°C (455°F to<br>491°F).)   | 648-093-00-2 | 309-972-3 | 101794-91-6 |
| Distillates (coal<br>tar), naphthalene<br>oils, acid exts.;<br>Methylnaphthalene<br>oil extract residue (A<br>complex combination<br>of hydrocarbons<br>obtained by debasing<br>the methylnaphthalene<br>fraction obtained<br>by the distillation  | 648-094-00-8 | 295-309-2 | 91995-48-1  |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| of coal tar and<br>boiling in the range<br>of approximately<br>230°C to 255°C<br>(446°F to 491°F).<br>Contains chiefly 1(2)-<br>methylnaphthalene,<br>naphthalene,<br>dimethylnaphthalene<br>and biphenyl.)   |              |           |             |
| Extract residues<br>(coal), naphthalene oil<br>alk., distn. residues;<br>Methylnapthalene<br>oil extract residue<br>(The residue from<br>the distillation<br>of alkali-washed<br>naphthalene oil having<br>an approximate<br>distillation range<br>of 220°C to 300°C<br>(428°F to 572°F).<br>Composed primarily<br>of naphthalene,<br>alkylnaphthalenes<br>and aromatic nitrogen<br>bases.)                 | 648-095-00-3 | 292-628-9 | 90641-05-7  |
| Extract oils (coal),<br>acidic, tar-base free;<br>Methylnaphthalene<br>oil extract residue<br>(The extract oil<br>boiling in the range of<br>approximately 220°C<br>to 265°C (428°F to<br>509°F) from coal<br>tar alkaline extract<br>residue produced by<br>an acidic wash such<br>as aqueous sulphuric<br>acid after distillation<br>to remove tar bases.<br>Composed primarily<br>of alkylnaphthalenes.) | 648-096-00-9 | 284-901-6 | 84989-12-8  |
| Distillates (coal tar),<br>benzole fraction,<br>distn. residues; Wash<br>oil (A complex<br>combination of   | 648-097-00-4 | 310-165-3 | 121620-46-0 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| hydrocarbons obtained<br>from the distillation of<br>crude benzole (high<br>temperature coal tar).<br>It may be a liquid<br>with the approximate<br>distillation range<br>of 150°C to 300°C<br>(302°F to 572°F) or<br>a semi-solid or solid<br>with a melting point<br>up to 70°C (158°F). It<br>is composed primarily<br>of naphthalene and<br>alkyl naphthalenes.)   |              |           |             |
| Creosote oil, high-<br>boiling distillate;<br>Wash oil (The high-<br>boiling distillation<br>fraction obtained from<br>the high temperature<br>carbonization of<br>bituminous coal which<br>is further refined<br>to remove excess<br>crystalline salts. It<br>consists primarily<br>of creosote oil with<br>some of the normal<br>polynuclear aromatic<br>salts, which are<br>components of coal tar<br>distillates, removed.<br>It is crystal free at<br>approximately 5°C<br>(41°F).) | 648-100-00-9 | 274-565-9 | 70321-79-8  |
| Extract residues (coal),<br>creosote oil acid; Wash<br>oil extract residue (A<br>complex combination<br>of hydrocarbons<br>from the base-freed<br>fraction from the<br>distillation of coal tar,<br>boiling in the range of<br>approximately 250°C<br>to 280°C (482°F to<br>536°F). It consists<br>predominantly of  | 648-102-00-X | 310-189-4 | 122384-77-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| biphenyl and isomeric diphenylnaphthalenes.)  |              |           |            |
| Anthracene oil,<br>anthracene paste;<br>Anthracence oil<br>fraction (The<br>anthracene-rich<br>solid obtained by<br>the crystallization<br>and centrifuging of<br>anthracene oil. It is<br>composed primarily of<br>anthracene, carbazole<br>and phenanthrene.)   | 648-103-00-5 | 292-603-2 | 90640-81-6 |
| Anthracene oil,<br>anthracene-low;<br>Anthracene oil fraction<br>(The oil remaining<br>after the removal, by a<br>crystallization process,<br>of an anthracene-<br>rich solid (anthracene<br>paste) from anthracene<br>oil. It is composed<br>primarily of two, three<br>and four membered<br>aromatic compounds.)                            | 648-104-00-0 | 292-604-8 | 90640-82-7 |
| Residues (coal tar),<br>anthracene oil distn.;<br>Anthracene oil<br>fraction (The residue<br>from the fraction<br>distillation of crude<br>anthracene boiling in<br>the approximate range<br>of 340°C to 400°C<br>(644°F to 752°F). It<br>consists predominantly<br>of tri- and polynuclear<br>aromatic and<br>heterocyclic<br>hydrocarbons.) | 648-105-00-6 | 295-505-8 | 92061-92-2 |
| Anthracene oil,<br>anthracene paste,<br>anthracene fraction;<br>Anthracene oil<br>fraction (A complex<br>combination of<br>hydrocarbons from<br>the distillation of   | 648-106-00-1 | 295-275-9 | 91995-15-2 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| anthracene obtained<br>by the crystallization<br>of anthracene oil<br>from bituminous high<br>temperature tar and<br>boiling in the range<br>of 330°C to 350°C<br>(626°F to 662°F).<br>It contains chiefly<br>anthracene, carbazole<br>and phenanthrene.  |              |           |            |
| Anthracene oil,<br>anthracene paste,<br>carbazole fraction;<br>Anthracene oil<br>fraction (A complex<br>combination of<br>hydrocarbons from<br>the distillation of<br>anthracene obtained<br>by crystallization<br>of anthracene oil<br>from bituminous coal<br>high temperature tar<br>and boiling in the<br>approximate range<br>of 350°C to 360°C<br>(662°F to 680°F).<br>It contains chiefly<br>anthracene, carbazole<br>and phenanthrene.) | 648-107-00-7 | 295-276-4 | 91995-16-3 |
| Anthracene oil,<br>anthracene paste,<br>distn. lights;<br>Anthracene oil<br>fraction (A complex<br>combination of<br>hydrocarbons from<br>the distillation of<br>anthracene obtained<br>by crystallization of<br>anthracene oil from<br>bituminous light<br>temperature tar and<br>boiling in the range of<br>approximately 290°C<br>to 340°C (554°F to<br>644°F). It contains<br>chiefly trinuclear  | 648-108-00-2 | 295-278-5 | 91995-17-4 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| aromatics and their<br>dihydro derivatives.)  |              | 20        |             |
| Tar oils, coal, low-<br>temp.; Tar oil,<br>high boiling (A<br>distillate from low-<br>temperature coal tar.<br>Composed primarily<br>of hydrocarbons,<br>phenolic compounds<br>and aromatic nitrogen<br>bases boiling<br>in the range of<br>approximately 160°C<br>to 340°C (320°F to<br>644°F).)   | 648-109-00-8 | 309-889-2 | 101316-87-4 |
| Phenols, ammonia<br>liquor ext.; Alkaline<br>extract (The<br>combination of<br>phenols extracted,<br>using isobutyl acetate,<br>from the ammonia<br>liquor condensed from<br>the gas evolved in<br>low-temperature (less<br>than 700°C (1292°F))<br>destructive distillation<br>of coal. It consists<br>predominantly of a<br>mixture of monohydric<br>and dihydric phenols.) | 648-111-00-9 | 284-881-9 | 84988-93-2  |
| Distillates (coal tar),<br>light oils, alk. exts.;<br>Alkaline extract (The<br>aqueous extract from<br>carbolic oil produced<br>by an alkaline wash<br>such as aqueous<br>sodium hydroxide.<br>Composed primarily<br>of the alkali salts<br>of various phenolic<br>compounds.)  | 648-112-00-4 | 292-610-0 | 90640-88-3  |
| Extracts, coal tar oil<br>alk.; Alkaline extract<br>(The extract from coal<br>tar oil produced by<br>an alkaline wash such<br>as aqueous sodium   | 648-113-00-X | 266-017-2 | 65996-83-0  |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| hydroxide. Composed<br>primarily of the<br>alkali salts of various<br>phenolic compounds.)   |              |           |             |
| Distillates (coal tar),<br>naphthalene oils, alk.<br>exts.; Alkaline extract<br>(The aqueous extract<br>from naphthalene<br>oil produced by an<br>alkaline wash such<br>as aqueous sodium<br>hydroxide. Composed<br>primarily of the<br>alkali salts of various<br>phenolic compounds.)  | 648-114-00-5 | 292-611-6 | 90640-89-4  |
| Extract residues (coal),<br>tar oil alk., carbonated,<br>limed; Crude phenols<br>(The product obtained<br>by treatment of coal<br>tar oil alkaline extract<br>with CO <sub>2</sub> and CaO.<br>Composed primarily<br>CaCO <sub>3</sub> , Ca(OH) <sub>2</sub> ,<br>Na <sub>2</sub> CO <sub>3</sub> and other<br>organic and inorganic<br>impurities.) | 648-115-00-0 | 292-629-4 | 90641-06-8  |
| Tar acids, brown-<br>coal, crude; Crude<br>phenols(An acidified<br>alkaline extract<br>of brown coal tar<br>distillate. Composed<br>primarily of phenol<br>and phenol homologs.)   | 648-117-00-1 | 309-888-7 | 101316-86-3 |
| Tar acids, brown-<br>coal, gasification;<br>Crude phenols (A<br>complex combination<br>of organic compounds<br>obtained from brown<br>coal gasification.<br>Composed primarily<br>of $C_{6-10}$ hydroxy<br>aromatic phenols and<br>their homologs.)  | 648-118-00-7 | 295-536-7 | 92062-22-1  |
| Tar acids, distn.<br>residues; Distillate  | 648-119-00-2 | 306-251-5 | 96690-55-0  |

| C. L. d.  | T. 1 I       |           | CAS        |
|---|--------------|-----------|------------|
| Substances<br>phenols (A residue  | Index number | EC number | CAS number |
| from the distillation<br>of crude phenol<br>from coal. It consists<br>predominantly of<br>phenols having carbon<br>numbers in the range<br>of $C_8$ through $C_{10}$ with<br>a softening point of<br>60°C to 80°C (140°F<br>to 176°F).)   |              |           |            |
| Tar acids,<br>methylphenol fraction;<br>Distillate phenols<br>(The fraction of tar<br>acid rich in 3-and<br>4-methylphenol,<br>recovered by<br>distillation of low-<br>temperature coal tar<br>crude tar acids.)  | 648-120-00-8 | 284-892-9 | 84989-04-8 |
| Tar acids,<br>polyalkylphenol<br>fraction; Distillate<br>phenols (The fraction<br>of tar acids, recovered<br>by distillation of low-<br>temperature coal<br>tar crude tar acids,<br>having an approximate<br>boiling range of<br>225°C to 320°C<br>(437°F to 608°F).<br>Composed primarily<br>of polyalkylphenols.) | 648-121-00-3 | 284-893-4 | 84989-05-9 |
| Tar acids, xylenol<br>fraction; Distillate<br>phenols (The fraction<br>of tar acids, rich<br>in 2,4- and 2,5-<br>dimethylphenol,<br>recovered by<br>distillation of low-<br>temperature coal tar<br>crude tar acids.)   | 648-122-00-9 | 284-895-5 | 84989-06-0 |
| Tar acids, ethylphenol<br>fraction; Distillate<br>phenols (The fraction<br>of tar acids, rich in<br>3- and 4-ethylphenol,   | 648-123-00-4 | 284-891-3 | 84989-03-7 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| recovered by<br>distillation of low-<br>temperature coal tar<br>crude tar acids.)  |              |           |            |
| Tar acids, 3,5-xylenol<br>fraction; Distillate<br>phenols (The fraction<br>of tar acids, rich in<br>3,5-dimethylphenol,<br>recovered by<br>distillation of low-<br>temperature coal tar<br>acids.)   | 648-124-00-X | 284-896-0 | 84989-07-1 |
| Tar acids, residues,<br>distillates, first-cut;<br>Distillate phenols<br>(The residue from the<br>distillation in the range<br>of 235°C to 355°C<br>(481°F to 697°F) of<br>light carbolic oil.)  | 648-125-00-5 | 270-713-1 | 68477-23-6 |
| Tar acids, cresylic,<br>residues; Distillate<br>phenols (The residue<br>from crude coal tar<br>acids after removal<br>of phenol, cresols,<br>xylenols and any<br>higher boiling<br>phenols. A black<br>solid with a melting<br>point approximately<br>80°C (176°F).<br>Composed primarily<br>of polyalkyphenols,<br>resin gums, and<br>inorganic salts.) | 648-126-00-0 | 271-418-0 | 68555-24-8 |
| Phenols, C <sub>9—11</sub><br>Distillate phenols   | 648-127-00-6 | 293-435-2 | 91079-47-9 |
| Tar acids, cresylic;<br>Distillate phenols (A<br>complex combination<br>of organic compounds<br>obtained from brown<br>coal and boiling<br>in the range of<br>approximately 200°C<br>to 230°C (392°F to<br>446°F). It contains   | 648-128-00-1 | 295-540-9 | 92062-26-5 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| chiefly phenols and<br>pyridine bases.)   |              |           |            |
| Tar acids, brown-<br>coal, C <sub>2</sub> -alkylphenol<br>fraction; Distillate<br>phenols (The distillate<br>from the acidification<br>of alkaline washed<br>lignite tar distillate<br>boiling in the range of<br>approximately 200°C<br>to 230°C (392°F to<br>446°F). Composed<br>primarily of m- and p-<br>ethylphenol as well as<br>cresols and xylenols.) | 648-129-00-7 | 302-662-9 | 94114-29-1 |
| Extract oils (coal),<br>naphthalene oils; Acid<br>extract (The aqueous<br>extract produced<br>by an acidic wash<br>of alkali-washed<br>naphthalene oil.<br>Composed primarily<br>of acid salts of various<br>aromatic nitrogen<br>bases including<br>pyridine, quinoline and<br>their alkyl derivatives.)   | 648-130-00-2 | 292-623-1 | 90641-00-2 |
| Tar bases, quinoline derivs.; Distillate bases  | 648-131-00-8 | 271-020-7 | 68513-87-1 |
| Tar bases, coal,<br>quinoline derivs.<br>fraction; Distillate<br>bases  | 648-132-00-3 | 274-560-1 | 70321-67-4 |
| Tar bases, coal, distn.<br>residues; Distillate<br>bases (The distillation<br>residue remaining<br>after the distillation<br>of the neutralized,<br>acid-extracted base-<br>containing tar fractions<br>obtained by the<br>distillation of coal<br>tars. It contains chiefly<br>aniline, collidines,<br>quinoline and   | 648-132-00-9 | 274-544-0 | 92062-29-8 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| quinoline derivatives   | Index number | EC number | CAS number  |
| and toluidines.)  |              |           |             |
| Hydrocarbon oils,<br>arom., mixed with<br>polyethylene and<br>polypropylene,<br>pyrolyzed, light<br>oil fraction; Heat<br>treatment products<br>(The oil obtained from<br>the heat treatment<br>of a polyethylene/<br>polypropylene mixture<br>with coal tar pitch<br>or aromatic oils. It<br>consists predominantly<br>of benzene and its<br>homologs boiling<br>in a range of<br>approximately 70°C<br>to 120°C (158°F to<br>248°F).) | 648-134-00-4 | 309-745-9 | 100801-63-6 |
| Hydrocarbon oils,<br>arom., mixed with<br>polyethylene,<br>pyrolyzed, light<br>oil fraction; Heat<br>treatment products<br>(The oil obtained from<br>the heat treatment<br>of polyethylene<br>with coal tar pitch<br>or aromatic oils. It<br>consists predominantly<br>of benzene and its<br>homologs boiling<br>in a range of 70°C<br>to 120°C (158°F to<br>248°F).)   | 648-135-00-X | 309-748-5 | 100801-65-8 |
| Hydrocarbon oils,<br>arom., mixed<br>with polystyrene,<br>pyrolyzed, light<br>oil fraction; Heat<br>treatment products<br>(The oil obtained from<br>the heat treatment<br>of polystyrene with<br>coal tar pitch or<br>aromatic oils. It   | 648-136-00-5 | 309-749-0 | 100801-66-9 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| consists predominantly<br>of benzene and its<br>homologs boiling<br>in a range of<br>approximately 70°C<br>to 210°C (158°F to<br>410°F).)  |              |           |             |
| Extract residues<br>(coal), tar oil alk.,<br>naphthalene distn.<br>residues; Naphthalene<br>oil extract residue (The<br>residue obtained from<br>chemical oil extracted<br>after the removal<br>of naphthalene by<br>distillation composed<br>primarily of two<br>to four membered<br>condensed ring<br>aromatic hydrocarbons<br>and aromatic nitrogen<br>bases.)  | 648-137-00-0 | 277-567-8 | 736665-18-6 |
| Creosote oil, low-<br>boiling distillate;<br>Wash oil (The low-<br>boiling distillation<br>fraction obtained from<br>the high temperature<br>carbonization of<br>bituminous coal,<br>which is further<br>refined to remove<br>excess crystalline<br>salts. It consists<br>primarily of creosote<br>oil with some of the<br>normal polynuclear<br>aromatic salts, which<br>are components of coal<br>tar distillate, removed.<br>It is crystal free at<br>approximately 38°C<br>(100°F).) | 648-138-00-6 | 274-566-4 | 70321-80-1  |
| Tar acids, cresylic,<br>sodium salts, caustic<br>solns.; Alkaline extract  | 648-139-00-1 | 272-361-4 | 68815-21-4  |
| Extract oils (coal),<br>tar base; Acid extract<br>(The extract from coal   | 648-140-00-7 | 266-020-9 | 65996-86-3  |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| tar oil alkaline extract<br>residue produced by<br>an acidic wash such<br>as aqueous sulphuric<br>acid after distillation to<br>remove naphthalene.<br>Composed primarily<br>of the acid salts of<br>various aromatic<br>nitrogen bases<br>including pyridine,<br>quinoline, and their<br>alkyl derivatives.)  |              |           |            |
| Tar bases, coal,<br>crude; Crude tar<br>bases (The reaction<br>product obtained by<br>neutralizing coal tar<br>base extract oil with<br>an alkaline solution,<br>such as aqueous<br>sodium hydroxide, to<br>obtain the free bases.<br>Composed primarily<br>of such organic<br>bases as acridine,<br>phenanthridine,<br>pyridine, quinoline and<br>their alkyl derivatives.) | 648-141-00-2 | 266-018-8 | 65996-84-1 |
| Residues (coal), liq.<br>solvent extn.; (A<br>cohesive powder<br>composed of coal<br>mineral matter and<br>undissolved coal<br>remaining after<br>extraction of coal by a<br>liquid solvent.)  | 648-142-00-8 | 302-681-2 | 94114-46-2 |
| Coal liquids, liq.<br>solvent extn. soln.;<br>(The product obtained<br>by filtration of coal<br>mineral matter and<br>undissolved coal<br>from coal extract<br>solution produced<br>by digesting coal<br>in a liquid solvent.<br>A black, viscous,<br>highly complex   | 648-143-00-3 | 302-682-8 | 94114-47-3 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| liquid combination<br>composed primarily<br>of aromatic and partly<br>hydrogenated aromatic<br>hydrocarbons,<br>aromatic nitrogen<br>compounds, aromatic<br>sulphur compounds,<br>phenolic and other<br>aromatic oxygen<br>compounds and their<br>alkyl derivatives.)   |              |           |            |
| Coal liquids, liq.<br>solvent extn.; (The<br>substantially solvent-<br>free product obtained<br>by the distillation<br>of the solvent from<br>filtered coal extract<br>solution produced by<br>digesting coal in a<br>liquid solvent. A black<br>semi-solid, composed<br>primarily of a<br>complex combination<br>of condensed-<br>ring aromatic<br>hydrocarbons,<br>aromatic nitrogen<br>compounds, aromatic<br>sulphur compounds,<br>phenolic compounds,<br>and other aromatic<br>oxygen compounds,<br>and their alkyl<br>derivatives.) | 648-144-00-9 | 302-683-3 | 94114-48-4 |
| Light oil (coal),<br>coke-oven; Crude<br>benzole (The volatile<br>organic liquid<br>extracted from the gas<br>evolved in the high<br>temperature (greater<br>than 700°C (1292°F))<br>destructive distillation<br>of coal. Composed<br>primarily of benzene,<br>toluene, and xylenes.<br>May contain other   | 648-147-00-5 | 255-012-5 | 65996-78-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| minor hydrocarbon constituents.)   |              |           |            |
| Distillates (coal), liq.<br>solvent extn., primary;<br>(The liquid product<br>of condensation of<br>vapors emitted during<br>the digestion of coal<br>in a liquid solvent and<br>boiling in the range<br>of approximately<br>$30^{\circ}$ C to $300^{\circ}$ C<br>( $86^{\circ}$ F to $572^{\circ}$ F).<br>Composed primarily<br>of partly hydrogenated<br>condensed-<br>ring aromatic<br>hydrocarbons,<br>aromatic compounds<br>containing nitrogen,<br>oxygen and sulphur,<br>and their alkyl<br>derivatives having<br>carbon numbers<br>predominantly in the<br>range of C <sub>4</sub> through<br>C <sub>14</sub> .) | 648-148-00-0 | 302-688-0 | 94114-52-0 |
| Distillates (coal),<br>solvent extn.,<br>hydrocracked;<br>(Distillate obtained<br>by hydrocracking of<br>coal extract or solution<br>produced by the liquid<br>solvent extraction<br>or supercritical gas<br>extraction process and<br>boiling in the range of<br>approximately 30°C<br>to 300°C (86°F to<br>572°F). Composed<br>primarily of aromatic,<br>hydrogenated aromatic<br>and naphthenic<br>compounds, their<br>alkyl derivatives<br>and alkanes with<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub>   | 648-149-00-6 | 302-689-6 | 94114-53-1 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| through $C_{14}$ . Nitrogen,<br>sulphur and oxygen-<br>containing aromatic<br>and hydrogenated<br>aromatic compounds<br>are also present.)   |              |           |            |
| Naphtha (coal),<br>solvent extn.,<br>hydrocracked;<br>(Fraction of the<br>distillate obtained by<br>hydrocracking of coal<br>extract or solution<br>produced by the liquid<br>solvent extraction<br>or supercritical<br>gas extraction<br>processes and boiling<br>in the range of<br>approximately $30^{\circ}$ C<br>to $180^{\circ}$ C ( $86^{\circ}$ F to<br>$356^{\circ}$ F). Composed<br>primarily of aromatic,<br>hydrogenated aromatic<br>and naphthenic<br>compounds, their<br>alkyl derivatives<br>and alkanes with<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>to C <sub>9</sub> . Nitrogen,<br>sulphur and oxygen-<br>containing aromatic<br>and hydrogenated<br>aromatic compounds<br>are also present.) | 648-150-00-1 | 302-690-1 | 94114-54-2 |
| Gasoline, coal solvent<br>extn., hydrocracked<br>naphtha; (Motor<br>fuel produced<br>by the reforming<br>of the refined<br>naphtha fraction<br>of the products of<br>hydrocracking of coal<br>extract or solution<br>produced by the liquid<br>solvent extraction<br>or supercritical  | 648-151-00-7 | 302-691-7 | 94114-55-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| gas extraction<br>processes and boiling<br>in the range of<br>approximately 30°C<br>to 180°C (86°F to<br>356°F). Composed<br>primarily of aromatic<br>and naphthenic<br>hydrocarbons, their<br>alkyl derivatives<br>and alkyl hydro-<br>carbons having carbon<br>numbers in the range<br>of $C_4$ through $C_9$ .)   |              |           |            |
| Distillates (coal),<br>solvent extn.,<br>hydrocracked<br>middle; (Distillate<br>obtained from the<br>hydrocracking of coal<br>extract or solution<br>produced by the liquid<br>solvent extraction<br>or supercritical<br>gas extraction<br>processes and<br>boiling in the range<br>of approximately<br>180°C to 300°C<br>(356°F to 572°F).<br>Composed primarily<br>of two-ring aromatic,<br>hydrogenated aromatic<br>and naphthenic<br>compounds, their<br>alkyl derivatives<br>and alkanes having<br>carbon numbers<br>predominantly in the<br>range of C <sub>9</sub> through<br>C <sub>14</sub> . Nitrogen, sulphur<br>and oxygen-containing<br>compounds are also<br>present.) | 648-152-00-2 | 302-692-2 | 94114-56-4 |
| Distillates (coal),<br>solvent extn.,<br>hydrocracked<br>hydrogenated middle;<br>(Distillate from the<br>hydrogenation of  | 648-153-00-8 | 302-693-8 | 94114-57-5 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| hydrocracked middle<br>distillate from coal<br>extract or solution<br>produced by the liquid<br>solvent extraction<br>or supercritical<br>gas extraction<br>processes and boiling<br>in the range of<br>approximately 180°C<br>to 280°C ( $356^{\circ}$ F to<br>$536^{\circ}$ F). Composed<br>primarily of<br>hydrogenated two-ring<br>carbon compounds<br>and their alkyl<br>derivatives having<br>carbon numbers<br>predominantly in the<br>range of C <sub>9</sub> through<br>C <sub>14</sub> .) |              |           |            |
| Light oil (coal),<br>semi-coking process;<br>Fresh oil (The<br>volatile organic liquid<br>condensed from the<br>gas evolved in the<br>low temperature (less<br>than 700°C (1292°F))<br>destructive distillation<br>of coal. Composed<br>primarily of $C_{6-10}$<br>hydrocarbons.)   | 648-156-00-4 | 292-635-7 | 90641-11-5 |
| Extracts (petroleum),<br>light naphthenic<br>distillate solvent   | 649-001-00-3 | 265-102-1 | 64742-03-6 |
| Extracts (petroleum),<br>heavy paraffinic<br>distillate solvent   | 649-002-00-9 | 265-103-7 | 64742-04-7 |
| Extracts (petroleum),<br>light paraffinic<br>distillate solvent   | 649-003-00-4 | 265-104-2 | 6472-05-8  |
| Extracts (petroleum),<br>heavy naphthenic<br>distillate solvent   | 649-004-00-X | 265-111-0 | 64742-11-6 |
| Extracts (petroleum),<br>light vacuum gas oil<br>solvent  | 649-005-00-5 | 295-341-7 | 91995-78-7 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Hydrocarbons C <sub>26—55</sub> , aromrich  | 649-006-00-0 | 307-753-7 | 97722-04-8 |
| Residues (petroleum),<br>atm. tower; Heavy<br>fuel oil (A complex<br>residuum from<br>the atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ and boiling<br>above approximately<br>$350^{\circ}$ C (662°F). This<br>stream is likely to<br>contain 5 wt. % or<br>more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.)  | 649-008-00-1 | 265-045-2 | 64741-45-3 |
| Gas oils (petroleum),<br>heavy vacuum;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{20}$<br>through $C_{50}$ and<br>boiling in the range of<br>approximately 350°C<br>to 600°C (662°F to<br>1112°F). This stream<br>is likely to contain 5<br>wt. % more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-009-00-7 | 265-058-3 | 64741-57-7 |
| Distillates (petroleum),<br>heavy catalytic<br>cracked; Heavy<br>fuel oil (A complex  | 649-010-00-2 | 265-063-0 | 64741-61-3 |
| •   |              | (0)       |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| combination of<br>hydrocarbons<br>produced by the<br>distillation of<br>products from a<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{15}$<br>through $C_{35}$ and<br>boiling in the range of<br>approximately 260°C<br>to 500°C (500°F to<br>932°F). This stream is<br>likely to contain 5 wt.<br>% or more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.)  |              |           |            |
| Clarified oils<br>(petroleum), catalytic<br>cracked; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons<br>produced as the<br>residual fraction<br>from distillation of<br>the products from<br>a catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ and boiling<br>above approximately<br>350°C (662°F). This<br>stream is likely to<br>contain 5 wt. % or<br>more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-011-00-8 | 265-064-6 | 64741-62-4 |
| Residues (petroleum),<br>hydrocracked;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons  | 649-012-00-3 | 265-076-1 | 64741-75-9 |

Index number **EC number** CAS number produced as the residual fraction from distillation of the products of

Substances

| of the products of<br>a hydrocracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ and boiling<br>above approximately<br>$350^{\circ}C$ (662°F).)   |              |           |            |
|--|--------------|-----------|------------|
| Residues (petroleum),<br>thermal cracked;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>produced as the<br>residual fraction from<br>distillation of the<br>product from a thermal<br>cracking process. It<br>consists predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ and boiling<br>above approximately<br>$350^{\circ}$ C ( $662^{\circ}$ F). This<br>stream is likely to<br>contain 5 wt. % or<br>more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-013-00-9 | 265-081-9 | 64741-80-6 |
| Distillates (petroleum),<br>heavy thermal<br>cracked; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons from<br>the distillation of<br>the products from<br>a thermal cracking<br>process. It consists<br>predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in  | 649-014-00-4 | 265-082-4 | 64741-81-7 |
|  |              |           |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| the range of $C_{15}$<br>through $C_{36}$ and<br>boiling in the range of<br>approximately 260°C<br>to 480°C (500°F to<br>896°F). This stream is<br>likely to contain 5 wt.<br>% or more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.)   |              |           |            |
| Gas oils (petroleum),<br>hydrotreated vacuum;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction<br>with hydrogen in<br>the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{13}$<br>through $C_{50}$ and<br>boiling in the range<br>of approximately<br>230°C to 600°C<br>(446°F to 1112°F).<br>This stream is likely<br>to contain 5 wt. %<br>or more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-015-00-X | 265-162-9 | 64742-59-2 |
| Residues (petroleum)<br>hydrodesulphurized<br>atmospheric tower;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>an atmospheric<br>tower residuum<br>with hydrogen in<br>the presence of<br>a catalyst under<br>conditions primarily<br>to remove organic  | 649-016-00-5 | 265-181-2 | 64742-78-5 |

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| Substances   | Index number | EC number | CAS number |
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| sulphur compounds.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ and boiling<br>above approximately<br>$350^{\circ}C$ ( $662^{\circ}F$ ). This<br>steam is likely to<br>contain 5 wt. % or<br>more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.)   |              |           |            |
| Gas oils (petroleum),<br>hydrodesulphurized<br>heavy vacuum; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons obtained<br>from a catalytic<br>hydrodesulphurization<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{20}$<br>through $C_{50}$ and<br>boiling in the range<br>of approximately<br>$350^{\circ}$ C to $600^{\circ}$ C<br>( $662^{\circ}$ F to $1112^{\circ}$ F).<br>This stream is likely<br>to contain 5 wt. %<br>or more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-017-00-0 | 265-189-6 | 64742-86-5 |
| Residues (petroleum),<br>steam-cracked; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons obtained<br>as the residual fraction<br>from the distillation<br>of the products of<br>a steam cracking<br>process (including<br>steam cracking to<br>produce ethylene). It   | 649-018-00-6 | 265-193-8 | 64742-90-1 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| consists predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>oredominantly greater<br>han $C_{14}$ and boiling<br>bove approximately<br>260°C (500°F). This<br>tream is likely to<br>contain 5 wt. % or<br>more of 4- to 6-<br>membered condensed<br>ing aromatic<br>hydrocarbons.)  |              |           |            |
| Residues (petroleum),<br>armospheric;<br>Heavy fuel oil (A<br>complex residuum<br>from atmospheric<br>listillation of crude<br>oil. It consists of<br>hydrocarbons having<br>arbon numbers<br>oredominantly greater<br>han $C_{11}$ and boiling<br>bove approximately<br>200°C (392°F). This<br>tream is likely to<br>contain 5 wt. % or<br>nore of 4- to 6-<br>nembered condensed<br>ing aromatic<br>hydrocarbons.) | 649-019-00-1 | 269-777-3 | 68333-22-2 |
| Clarified oils<br>petroleum),<br>nydrodesulphurized<br>eatalytic cracked;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>eatalytic cracked<br>clarified oil with<br>nydrogen to convert<br>organic sulphur to<br>nydrogen sulfide<br>which is removed.<br>t consists of   | 649-020-00-7 | 269-782-0 | 68333-26-6 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| than $C_{20}$ and boiling<br>above approximately<br>350°C (662°F). This<br>stream is likely to<br>contain 5 wt. % or<br>more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.)   |              |           |            |
| Distillates (petroleum),<br>hydrodesulphurized<br>intermediate catalytic<br>cracked; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons<br>obtained by treating<br>intermediate catalytic<br>cracked distillates<br>with hydrogen to<br>convert organic<br>sulphur to hydrogen<br>sulfide which is<br>removed. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{30}$ and<br>boiling in the range<br>of approximately<br>205°C to 450°C<br>(401°F to 842°F). It<br>contains a relatively<br>large proportion of<br>tricyclic aromatic<br>hydrocarbons.) | 649-021-00-2 | 269-783-6 | 68333-27-7 |
| Distillates (petroleum),<br>hydrodesulphurized<br>heavy cataytic<br>cracked; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons obtained<br>by treatment of<br>heavy catalytic<br>cracked distillates<br>with hydrogen to<br>convert organic<br>sulphur to hydrogen   | 649-022-00-8 | 269-784-1 | 68333-28-8 |

| Substances                                  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| sulfide which is                            |              |           |            |
| removed. It consists of                     |              |           |            |
| hydrocarbons having                         |              |           |            |
| carbon numbers                              |              |           |            |
| predominantly in                            |              |           |            |
| the range of C <sub>15</sub>                |              |           |            |
| through C <sub>35</sub> and                 |              |           |            |
| boiling in the range of                     |              |           |            |
| approximately 260°C                         |              |           |            |
| to 500°C (500°F to                          |              |           |            |
| 932°F). This stream is                      |              |           |            |
| likely to contain 5 wt.                     |              |           |            |
| % or more of 4- to 6-<br>membered condensed |              |           |            |
| ring aromatic                               |              |           |            |
| hydrocarbons.)                              |              |           |            |
| •   |              |           |            |
| Fuel oil, residues-                         | 649-023-00-3 | 270-674-0 | 68476-32-4 |
| straight-run gas oils,                      |              |           |            |
| high-sulphur; Heavy                         |              |           |            |
| fuel oil                                    |              |           |            |
| Fuel oil, residual;                         | 649-024-00-9 | 270-675-6 | 68476-33-5 |
| Heavy fuel oil (The                         |              |           |            |
| liquid product from                         |              |           |            |
| various refinery                            |              |           |            |
| streams, usually residues. The              |              |           |            |
| composition is                              |              |           |            |
| complex and varies                          |              |           |            |
| with the source of the                      |              |           |            |
| crude oil.)                                 |              |           |            |
|   | 649-025-00-4 | 270-792-2 | 68478-13-7 |
| Residues (petroleum),<br>catalytic reformer | 049-023-00-4 | 270-792-2 | 084/8-13-/ |
| fractionator residue                        |              |           |            |
| distn; Heavy fuel                           |              |           |            |
| oil (A complex                              |              |           |            |
| residuum from the                           |              |           |            |
| distillation of catalytic                   |              |           |            |
| reformer fractionator                       |              |           |            |
| residue. It boils above                     |              |           |            |
| approximately 399°C                         |              |           |            |
| (750°F).)                                   |              |           |            |
| Residues (petroleum),                       | 649-026-00-X | 270-796-4 | 68478-17-1 |
| heavy coker gas oil                         |              |           |            |
| and vacuum gas oil;                         |              |           |            |
| Heavy fuel oil (A                           |              |           |            |
| complex combination                         |              |           |            |
| of hydrocarbons                             |              |           |            |
| produced as the                             |              |           |            |
| residual fraction                           |              |           |            |
| from the distillation                       |              | 67        |            |

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| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| of heavy coker gas<br>oil and vacuum gas<br>oil. It predominantly<br>consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{13}$ and boiling<br>above approximately<br>230°C (446°F).)   |              |           |            |
| Residues (petroleum),<br>heavy coker and<br>light vacuum;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>produced as the<br>residual fraction from<br>the distillation of<br>heavy coker gas oil<br>and light vacuum<br>gas oil. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{13}$ and boiling<br>above approximately<br>$230^{\circ}C$ (446°F).) | 649-027-00-5 | 270-983-0 | 68512-61-8 |
| Residues (petroleum),<br>light vacuum; Heavy<br>fuel oil (A complex<br>residuum from the<br>vacuum distillation<br>of the residuum from<br>the atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{13}$ and boiling<br>above approximately<br>$230^{\circ}C$ (446°F).)  | 649-028-00-0 | 270-984-6 | 68512-62-9 |
| Residues (petroleum),<br>steam-cracked light;<br>Heavy fuel oil (A<br>complex residuum<br>from the distillation<br>of the products from   | 649-029-00-6 | 271-013-9 | 68513-69-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| a steam-cracking<br>process. It consists<br>predominantly<br>of aromatic and<br>unsaturated<br>hydrocarbons having<br>carbon numbers<br>greater than $C_7$ and<br>boiling in the range of<br>approximately 101°C<br>to 555°C (214°F to<br>1030°F).)   |              | 271 204 7 | 60552.00.4 |
| Fuel oil, No 6; Heavy<br>fuel oil (A distillate<br>oil having a minimum<br>viscosity of 900 SUS<br>at 37.7°C (100°F)<br>to a maximum of<br>9000 SUS at 37.7°C<br>(100°F).)  | 649-030-00-1 | 271-384-7 | 68553-00-4 |
| Residues (petroleum),<br>topping plant, low-<br>sulphur; Heavy fuel<br>oil (A low-sulphur<br>complex combination<br>of hydrocarbons<br>produced as the<br>residual fraction from<br>the topping plant<br>distillation of crude<br>oil. It is the residuum<br>after the straight-run<br>gasoline cut, kerosene<br>cut and gas oil cut<br>have been removed.) | 649-031-00-7 | 271-763-7 | 68607-30-7 |
| Gas oils (petroleum),<br>heavy atmospheric;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{35}$ and<br>boiling in the range of<br>approximately 121°C                  | 649-032-00-2 | 272-184-2 | 68783-08-4 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| to 510°C (250°F to<br>950°F).)   |              |           |            |
| Residues (petroleum),<br>coker scrubber,<br>Condensed-ring-<br>aromcontg.; Heavy<br>fuel oil (A very<br>complex combination<br>of hydrocarbons<br>produced as the<br>residual fraction from<br>the distillation of<br>vacuum residuum<br>and the products from<br>a thermal cracking<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>20</sub> and boiling<br>above approximately<br>$350^{\circ}$ C (662°F). This<br>stream is likely to<br>contain 5 wt. % or<br>more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-033-00-8 | 272-187-9 | 68783-13-1 |
| Distillates (petroleum),<br>petroleum residues<br>vacuum; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>vacuum distillation<br>of the residuum from<br>the atmospheric<br>distillation of crude<br>oil.)  | 649-034-00-3 | 273-263-4 | 68955-27-1 |
| Residues (petroleum),<br>steam-cracked,<br>resinous; Heavy<br>fuel oil (A complex<br>residuum from the<br>distillation of steam-<br>cracked petroleum<br>residues.)  | 649-035-00-9 | 273-272-3 | 68955-36-2 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Distillates (petroleum),<br>intermediate vacuum;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{14}$<br>through $C_{42}$ and<br>boiling in the range<br>of approximately<br>250°C to 545°C<br>(482°F to 1013°F).<br>This stream is likely<br>to contain 5 wt. %<br>or more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-036-00-4 | 274-683-0 | 70592-76-6 |
| Distillates (petroleum),<br>light vacuum;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{35}$ and<br>boiling in the range of<br>approximately 250°C<br>to 545°C (482°F to<br>1013°F).)  | 649-037-00-X | 247-684-6 | 70592-77-7 |
| Distillates (petroleum),<br>vacuum; Heavy<br>fuel oil (A complex<br>combination of  | 649-038-00-5 | 274-685-1 | 70592-78-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| hydrocarbons<br>produced by the<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists<br>of hydrocarbons<br>having numbers<br>predominantly in<br>the range of $C_{15}$<br>through $C_{50}$ and<br>boiling in the range<br>of approximately<br>270°C to 600°C<br>(518°F to 1112°F).<br>This stream is likely<br>to contain 5 wt. %<br>or more of 4- to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.)  |              |           |            |
| Gas oils (petroleum),<br>hydrodesulphurized<br>coker heavy vacuum;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>obtained by<br>hydrodesulphurization<br>of heavy coker<br>distillate stocks.<br>It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range $C_{18}$ to $C_{44}$ and<br>boiling in the range<br>of approximately<br>$304^{\circ}$ C to $548^{\circ}$ C<br>( $579^{\circ}$ F to $1018^{\circ}$ F).<br>Likely to contain $5\%$<br>or more of 4- to 6-<br>members condensed<br>ring aromatic<br>hydrocarbons.) | 649-039-00-0 | 285-555-9 | 85117-03-9 |
| Residues (petroleum),<br>steam-cracked,<br>distillates; Heavy  | 649-040-00-6 | 292-657-7 | 90669-75-3 |

| Substances<br>fuel oil (A complex   | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| combination of<br>hydrocarbons obtained<br>during the production<br>of refined petroleum<br>tar by the distillation<br>of steam cracked tar. It<br>consists predominantly<br>of aromatic and<br>other hydrocarbons<br>and organic sulphur<br>compounds.)  |              |           |            |
| Residues (petroleum),<br>vacuum, light; Heavy<br>fuel oil (A complex<br>residuum from the<br>vacuum distillation<br>of the residuum<br>from atmospheric<br>distillation of crude<br>oil. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{24}$ and boiling<br>above approximately<br>$390^{\circ}C$ (734°F).)            | 649-041-00-1 | 292-658-2 | 90669-76-4 |
| Fuel oil, heavy,<br>high-sulphur; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons obtained<br>by the distillation of<br>crude petroleum. It<br>consists predominantly<br>of aliphatic, aromatic<br>and cycloaliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly higher<br>than $C_{25}$ and boiling<br>above approximately<br>$400^{\circ}C$ (752°F).) | 649-042-00-7 | 295-396-7 | 92045-14-2 |
| Residues (petroleum),<br>catalytic cracking;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>produced as the  | 649-043-00-2 | 295-511-0 | 92061-97-7 |

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| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| residual fraction from<br>the distillation of<br>the products from<br>a catalytic cracking<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{11}$ and boiling<br>above approximately<br>200°C (392°F).)   |              |           |            |
| Distillates (petroleum),<br>intermediate catalytic<br>cracked, thermally<br>degraded; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of products<br>from a catalytic<br>cracking process<br>which has been used<br>as a heat transfer<br>fluid. It consists<br>predominantly of<br>hydrocarbons boiling<br>in the range of<br>approximately 220°C<br>to 450°C (428°F to<br>842°F). This stream<br>is likely to contain<br>organic sulphur<br>compounds.) | 649-044-00-8 | 295-990-6 | 92201-59-7 |
| Residual oils<br>(petroleum); Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons, sulphur<br>compounds and metal-<br>containing organic<br>compounds obtained<br>as the residue from<br>refinery fractionation<br>cracking processes. It<br>produces a finished oil<br>with a viscosity above<br>2 cSt. at 100°C.)  | 649-045-00-3 | 298-754-0 | 93821-66-0 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| Residues, steam<br>cracked, thermally<br>treated; Heavy fuel<br>oil (A complex<br>combination of<br>hydrocarbons obtained<br>by the treatment<br>and distillation of<br>raw steam-cracked<br>naphtha. It consists<br>predominantly<br>of unsaturated<br>hydrocarbons boiling<br>in the range above<br>approximately 180°C<br>(356°F).)  | 649-046-00-9 | 308-733-0 | 98219-64-8  |
| Distillates (petroleum),<br>hydrodesulphurized<br>full-range middle;<br>Heavy fuel oil (A<br>complex combination<br>of hydrocarbons<br>obtained by treating a<br>petroleum stock with<br>hydrogen. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>9</sub><br>through C <sub>25</sub> and<br>boiling in the range of<br>approximately 150°C<br>to 400°C (302°F to<br>752°F).) | 649-047-00-4 | 309-863-0 | 101316-57-8 |
| Residues (petroleum),<br>catalytic reformer<br>fractionator; Heavy<br>fuel oil (A complex<br>combination of<br>hydrocarbons<br>produced as the<br>residual fraction<br>from distillation of<br>the product from a<br>catalytic reforming<br>process. It consists<br>of predominantly<br>aromatic<br>hydrocarbons having   | 649-048-00-X | 265-069-3 | 64741-67-9  |

CAS number

carbon numbers predominantly in the range of  $C_{10}$ through C25 and boiling in the range of approximately 160°C to 400°C (320°F to 725°F). This stream is likely to contain 5 wt. % or more of 4- or 6membered condensed ring aromatic hydrocarbons.) Petroleum: Crude 649-049-00-5 232-298-5 8002-05-9

**EC number** 

Index number

Substances

combination of

| Petroleum; Crude<br>oil (A complex<br>combination of<br>hydrocarbons. It<br>consists predominantly<br>of aliphatic, alicyclic<br>and aromatic<br>hydrocarbons. It<br>may also contain<br>small amounts of<br>nitrogen, oxygen and<br>sulphur compounds.<br>This category<br>encompasses light,<br>medium, and heavy<br>petroleums, as well<br>as the oils extended<br>from tar sands.<br>Hydrocarbonaceous<br>materials requiring<br>major chemical<br>changes for their<br>recovery or conversion<br>to petroleum refinery<br>feedstocks such as<br>crude shale oils;<br>upgraded shale oils<br>and liquid coal fuels<br>are not included in this<br>definition.) | 649-049-00-5 | 232-298-5 | 8002-05-9  |
|--|--------------|-----------|------------|
| Gases (petroleum),<br>catalytic cracked<br>naphtha depropanizer<br>overhead, C <sub>3</sub> -rich<br>acid-free; Petroleum<br>gas (A complex  | 649-062-00-6 | 270-755-0 | 68477-73-6 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| hydrocarbons obtained<br>from fractionation<br>of catalytic cracked<br>hydrocarbons and<br>treated to remove<br>acidic impurities.<br>It consists of<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_2$ through<br>$C_4$ , predominantly $C_3$ .)   |              |           |            |
| Gases (petroleum),<br>catalytic cracker;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of the<br>products from a<br>catalytic cracking<br>process. It consists<br>predominantly<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)                  | 649-063-00-1 | 270-756-6 | 68477-74-7 |
| Gases (petroleum),<br>catalytic cracker, $C_1$<br>$\5$ -rich; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of products<br>from a catalytic<br>cracking process. It<br>consists of aliphatic<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_6$ , predominantly $C_1$<br>through $C_5$ .) | 649-064-00-7 | 270-757-1 | 68477-75-8 |
| Gases (petroleum),<br>catalytic polymd.<br>naphtha stabilizer<br>overhead, $C_{2-4}$ -<br>rich; Petroleum  | 649-065-00-2 | 270-758-7 | 68477-76-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| gas (A complex<br>combination of<br>hydrocarbons obtained<br>from the fractionation<br>stabilization of<br>catalytic polymerized<br>naphtha. It consists of<br>aliphatic hydrocarbons<br>having carbon<br>numbers in the range<br>of $C_2$ through $C_6$ ,<br>predominantly $C_2$<br>through $C_4$ .)   |              |           |            |
| Gases (petroleum),<br>catalytic reformer, $C_1$<br>$\4$ -rich; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by<br>distillation of<br>products from a<br>catalytic reforming<br>process. It consists of<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_6$ , predominantly $C_1$<br>through $C_4$ .)                | 649-066-00-8 | 270-760-8 | 68477-79-2 |
| Gases (petroleum),<br>$C_{3-5}$ olefinic-<br>paraffinic alkylation<br>feed; Petroleum<br>gas (A complex<br>combination of<br>olefinic and paraffinic<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_3$ through<br>$C_5$ which are used<br>as alkylation feed.<br>Ambient temperatures<br>normally exceed the<br>critical temperature of<br>these combinations.) | 649-067-00-3 | 270-765-5 | 68477-83-8 |
| Gases (petroleum), C <sub>4</sub> -<br>rich; Petroleum gas (A<br>complex combination<br>of hydrocarbons   | 649-068-00-9 | 270-767-6 | 68477-85-0 |

| ~  |              |           |            |
|--|--------------|-----------|------------|
| Substances   | Index number | EC number | CAS number |
| produced by<br>distillation of products<br>from a catalytic<br>fractionation process.<br>It consists of aliphatic<br>hydrocarbons having<br>carbon numbers in the<br>range of C <sub>3</sub> through<br>C <sub>5</sub> , predominantly C <sub>4</sub> .)   |              |           |            |
| Gases (petroleum),<br>deethanizer overheads;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced from<br>distillation of the<br>gas and gasoline<br>fractions from the<br>catalytic cracking<br>process. It contains<br>predominantly ethane<br>and ethylene.)   | 649-069-00-4 | 270-768-1 | 68477-86-1 |
| Gases (petroleum),<br>deisobutanizer<br>tower overheads;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by<br>the atmospheric<br>distillation of a butane-<br>butylene stream. It<br>consists of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_3$ through<br>$C_{4.}$ ) | 649-070-00-X | 270-769-7 | 68477-87-2 |
| Gases (petroleum),<br>depropanizer dry,<br>propene-rich;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of products<br>from the gas and<br>gasoline fractions of<br>a catalytic cracking<br>process. It consists   | 649-071-00-5 | 270-772-3 | 68477-90-7 |

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| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| predominantly of<br>propylene with some<br>ethane and propane.   |              |           |            |
| Gases (petroleum),<br>depropanizer<br>overheads; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by<br>distillation of<br>products from the<br>gas and gasoline<br>fractions of a catalytic<br>cracking process. It<br>consists of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{4.}$ )    | 649-072-00-0 | 270-773-9 | 68477-91-8 |
| Gases (petroleum),<br>gas recovery plant<br>depropanizer<br>overheads; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>by fractionation<br>of miscellaneous<br>hydrocarbon<br>streams. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers in the<br>range of C <sub>1</sub> through<br>C <sub>4</sub> , predominantly<br>propane.) | 649-073-00-6 | 270-777-0 | 68477-94-1 |
| Gases (petroleum),<br>Girbatol unit feed;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons that<br>is used as the feed<br>into the Girbatol<br>unit to remove<br>hydrogen sulfide. It<br>consists of aliphatic<br>hydrocarbons having<br>carbon numbers   | 649-074-00-1 | 270-778-6 | 68477-95-2 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| predominantly in the range of $C_2$ through $C_{4.}$ )  |              |           |            |
| Gases (petroleum),<br>isomerized naphtha<br>fractionator, C <sub>4</sub> -rich,<br>hydrogen sulfide-free;<br>Petroleum gas  | 649-075-00-7 | 270-782-8 | 68477-99-6 |
| Tail gas (petroleum),<br>catalytic cracked<br>clarified oil and<br>thermal cracked<br>vacuum residue<br>fractionation reflux<br>drum; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from fractionation<br>of catalytic cracked<br>clarified oil<br>and thermal<br>cracked vacuum<br>residue. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .) | 649-076-00-2 | 270-802-5 | 68478-21-7 |
| Tail gas (petroleum),<br>catalytic cracked<br>naphtha stabilization<br>absorber; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from the stabilization<br>of catalytic cracked<br>naphtha. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)  | 649-077-00-8 | 270-803-0 | 68478-22-8 |
| Tail gas (petroleum),<br>catalytic cracker,<br>catalytic reformer and   | 649-078-00-3 | 270-804-6 | 68478-24-0 |

CAS number

| Substances  | mucz number  | EC number | CAS number |
|---|--------------|-----------|------------|
| hydrodesulphurizer  |              |           |            |
| combined fractionator;  |              |           |            |
| Petroleum gas (A  |              |           |            |
| complex combination   |              |           |            |
| of hydrocarbons   |              |           |            |
| obtained from the   |              |           |            |
| fractionation of  |              |           |            |
| products from catalytic   |              |           |            |
| cracking, catalytic   |              |           |            |
| reforming and   |              |           |            |
| hydrodesulphurizing   |              |           |            |
| processes treated   |              |           |            |
| to remove acidic  |              |           |            |
| impurities. It consists   |              |           |            |
| predominantly of  |              |           |            |
| hydrocarbons having   |              |           |            |
| carbon numbers  |              |           |            |
| predominantly in the  |              |           |            |
| range of $C_1$ through  |              |           |            |
| • • •   |              |           |            |
| C <sub>5</sub> .)   |              |           |            |
| Tail gas (petroleum),<br>catalytic reformed<br>naphtha fractionation<br>stabilizer; Petroleum | 649-079-00-9 | 270-806-7 | 68478-26-2 |
| Studilizer, i endiculli   |              |           |            |

**EC number** 

Index number

270-813-5

68478-32-0

| Tail gas (petroleum),          | 649-080-00-4 |
|--------------------------------|--------------|
| saturate gas plant             |              |
| mixed stream, C <sub>4</sub> - |              |
| rich; Petroleum                |              |
| gas (A complex                 |              |
| combination of                 |              |
| hydrocarbons obtained          |              |
| from the fractionation         |              |
| stabilization of               |              |
| straight-run naphtha,          |              |
| distillation tail gas          |              |
| and catalytic reformed         |              |
| naphtha stabilizer             |              |

Substances

C<sub>4</sub>.)

gas (A complex combination of hydrocarbons obtained from the fractionation stabilization of catalytic reformed naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C<sub>1</sub> through

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| tail gas. It consists of<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_3$ through<br>$C_6$ , predominantly<br>butane and isobutane.)   |              |           |            |
| Tail gas (petroleum),<br>saturate gas recovery<br>plant, $C_{1-2}$ -rich;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>fractionation of<br>distillate tail gas,<br>straight-run naphtha,<br>catalytic reformed<br>naphtha stabilizer<br>tail gas. it consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers in the<br>range of C <sub>1</sub> through<br>C <sub>5</sub> , predominantly<br>methane and ethane.) | 649-081-00-X | 270-814-0 | 68478-33-1 |
| Tail gas (petroleum),<br>vacuum residues<br>thermal cracker;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>thermal cracking of<br>vacuum residues.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)   | 649-082-00-5 | 270-815-6 | 68478-34-2 |
| Hydrocarbons, $C_3$<br>_4-rich, petroleum<br>distillate; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by<br>distillation and<br>condensation of crude  | 649-083-00-0 | 270-990-9 | 68512-91-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| oil. It consists of<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_3$ through<br>$C_5$ , predominantly $C_3$<br>through $C_4$ .)  |              |           |            |
| Gases (petroleum),<br>full-range straight-run<br>naphtha dehexanizer<br>off; Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>fractionation of the<br>full-range straight-run<br>naphtha. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{6.}$ )   | 649-084-00-6 | 271-000-8 | 68513-15-5 |
| Gases (petroleum),<br>hydrocracking<br>depropanizer off,<br>hydrocarbon-rich;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbon<br>produced by the<br>distillation of products<br>from a hydrocracking<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>1</sub><br>through C <sub>4</sub> . It may<br>also contain small<br>amounts of hydrogen<br>and hydrogen sulfide.) | 649-085-00-1 | 271-001-3 | 68513-16-6 |
| Gases (petroleum),<br>light straight-run<br>naphtha stabilizer<br>off; Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>stabilization of<br>light straight-run  | 649-086-00-7 | 271-002-9 | 68513-17-7 |
| J   |              | 84        |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| naphtha. It consists<br>of saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{6}$ .)  |              |           |            |
| Residues (petroleum),<br>alkylation splitter,<br>$C_4$ -rich; Petroleum<br>gas (A complex<br>residuum from the<br>distillation of streams<br>from various refinery<br>operations. It consists<br>of hydrocarbons<br>having carbon<br>numbers in the<br>range of $C_4$ through<br>$C_5$ , predominantly<br>butane, and boiling<br>in the range of<br>approximately -11.7°C<br>to 27.8°C (11°F to<br>82°F).)   | 649-087-00-2 | 271-010-2 | 68513-66-6 |
| Hydrocarbons, $C_1$<br>4, sweetened;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>hydrocarbon gases to<br>a sweetening process<br>to convert mercaptans<br>or to remove<br>acidic impurities.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_1$<br>through $C_4$ and<br>boiling in the range of<br>approximately $-164^{\circ}C$<br>to $-0.5^{\circ}C$ ( $-263^{\circ}F$ to<br>$31^{\circ}F$ .) | 649-089-00-3 | 271-038-5 | 68514-36-3 |
| Hydrocarbons,<br>$C_{1-3}$ ; Petroleum<br>gas (A complex   | 649-090-00-9 | 271-259-7 | 68527-16-2 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| combination of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_1$<br>through $C_3$ and<br>boiling in the range of<br>approximately -164°C<br>to -42°C (-263°F to<br>-44°F).)   |              |           |            |
| Hydrocarbons, C <sub>1—4</sub> ,<br>debutanizer fraction;<br>Petroleum gas   | 649-091-00-4 | 271-261-8 | 68527-19-5 |
| Gases (petroleum), $C_1$<br>5, wet; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of<br>crude oil and/or the<br>cracking of tower<br>gas oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .) | 649-092-00-X | 271-624-0 | 68602-83-5 |
| Hydrocarbons, C <sub>2—4</sub> ;<br>Petroleum gas  | 649-093-00-5 | 271-734-9 | 68606-25-7 |
| Hydrocarbons, C <sub>3</sub> ;<br>Petroleum gas  | 649-094-00-0 | 271-735-4 | 68606-26-8 |
| Gases (petroleum),<br>alkylation feed;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>catalytic cracking of<br>gas oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_3$ through<br>$C_{4.}$ )                                   | 649-095-00-6 | 271-737-5 | 68606-27-9 |
| Gases (petroleum),<br>depropanizer bottoms<br>fractionation off;   | 649-096-00-1 | 271-742-2 | 68606-34-8 |

| Substances<br>Petroleum gas (A   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| complex combination<br>of hydrocarbons<br>obtained from<br>the fractionation<br>of depropanizer<br>bottoms. It consists<br>predominantly of<br>butane, isobutane and<br>butadiene.)  |              |           |            |
| Gases (petroleum),<br>refinery blend;<br>Petroleum gas (A<br>complex combination<br>obtained from<br>various processes. It<br>consists of hydrogen,<br>hydrogen sulfide and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)   | 649-097-00-7 | 272-183-7 | 68783-07-3 |
| Gases (petroleum),<br>catalytic cracking;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of the<br>products from a<br>catalytic cracking<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>3</sub> through<br>$C_{5}$ .) | 649-098-00-2 | 272-203-4 | 68783-64-2 |
| Gases (petroleum),<br>$C_{2-4}$ , sweetened;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>a petroleum distillate<br>to a sweetening<br>process to convert<br>mercaptans or<br>to remove acidic   | 649-099-00-8 | 272-205-5 | 68783-65-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| impurities. It consists<br>predominantly<br>of saturated<br>and unsaturated<br>hydrocarbon having<br>carbon numbers<br>predominantly in<br>the range of $C_2$<br>through $C_4$ and<br>boiling in the range of<br>approximately -51°C<br>to -34°C (-60°F to<br>-30°F).)   |              |           |            |
| Gases (petroleum),<br>crude oil fractionation<br>off; Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>fractionation of crude<br>oil. It consists of<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_3$ through<br>$C_5$ .)       | 649-100-00-1 | 272-871-7 | 68918-99-0 |
| Gases (petroleum),<br>dehexanizer off;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>fractionation of<br>combined naphtha<br>streams. It consists<br>of saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .) | 649-101-00-7 | 272-872-2 | 68919-00-6 |
| Gases (petroleum),<br>light straight run<br>gasoline fractionation<br>stabilizer off;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by the   | 649-102-00-2 | 272-878-5 | 68919-05-1 |

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|---|--------------|-----------|------------|
| Substances<br>fractionation of  | Index number | EC number | CAS number |
| light straight-run<br>gasoline. It consists<br>of saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)  |              |           |            |
| Gases (petroleum),<br>naphtha unifiner<br>desulphurization<br>stripper off; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by a<br>naphtha unifiner<br>desulphurization<br>process and stripped<br>from the naphtha<br>product. It consists<br>of saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{4}$ .) | 649-103-00-8 | 272-879-0 | 68919-06-2 |
| Gases (petroleum),<br>straight-run naphtha<br>catalytic reforming<br>off; Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>catalytic reforming of<br>straight-run naphtha<br>and fractionation of<br>the total effluent. It<br>consists of methane,<br>ethane, and propane.)  | 649-104-00-3 | 272-882-7 | 68919-09-5 |
| Gases (petroleum),<br>fluidized catalytic<br>cracker splitter<br>overheads; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>fractionation of the  | 649-105-00-9 | 272-893-7 | 68919-20-0 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| charge to the $C_3-C_4$<br>splitter. It consists<br>predominantly of $C_3$<br>hydrocarbons.)  |              |           |            |
| Gases (petroleum),<br>straight-run stabilizer<br>off; Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>fractionation of the<br>liquid from the first<br>tower used in the<br>distillation of crude<br>oil. It consists of<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{4.}$ | 649-106-00-4 | 272-883-2 | 68919-10-8 |
| Gases (petroleum),<br>catalytic cracked<br>naphtha debutanizer;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>fractionation of<br>catalytic cracked<br>naphtha. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_4$ .)   | 649-107-00-X | 273-169-3 | 68952-76-1 |
| Tail gas (petroleum),<br>catalytic cracked<br>distillate and naphtha<br>stabilizer; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>by the fractionation<br>of catalytic cracked<br>naphtha and<br>distillate. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers   | 649-108-00-5 | 273-170-9 | 68952-77-2 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| predominantly in the range of $C_1$ through $C_4$ .)  |              |           |            |
| Tail gas (petroleum),<br>thermal-cracked<br>distillate, gas oil and<br>naphtha absorber;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>the separation of<br>thermal-cracked<br>distillates, naphtha<br>and gas oil. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)                                    | 649-109-00-0 | 273-175-6 | 68952-81-8 |
| Tail gas (petroleum),<br>thermal cracked<br>hydrocarbon<br>fractionation stabilizer,<br>petroleum coking;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>the fractionation<br>stabilization of<br>thermal cracked<br>hydrocarbons from<br>a petroleum coking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .) | 649-110-00-6 | 273-176-1 | 68952-82-9 |
| Gases (petroleum,<br>light steam-cracked,<br>butadiene conc.;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of<br>products from a  | 649-111-00-1 | 273-265-5 | 68955-28-2 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| thermal cracking<br>process. It consists of<br>hydrocarbons having<br>a carbon number<br>predominantly of C <sub>4</sub> .)  |              |           |            |
| Gases (petroleum),<br>straight-run naphtha<br>catalytic reformer<br>stabilizer overhead;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>catalytic reforming of<br>straight-run naphtha<br>and the fractionation<br>of the total effluent.<br>It consists of<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{4.}$ ) | 649-112-00-7 | 273-270-2 | 68955-34-0 |
| Hydrocarbons, C <sub>4</sub> ;<br>Petroleum gas  | 649-113-00-2 | 289-339-5 | 87741-01-3 |
| Alkanes, C <sub>1-4</sub> , C <sub>3</sub> -<br>rich; Petroleum gas  | 649-114-00-8 | 292-456-4 | 90622-55-2 |
| Gases (petroleum),<br>steam-cracker $C_3$ -<br>rich; Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of products<br>from a steam cracking<br>process. It consists<br>predominantly of<br>propylene with<br>some propane and<br>boils in the range of<br>approximately $-70^{\circ}$ C<br>to $0^{\circ}$ C ( $-94^{\circ}$ F to<br>$32^{\circ}$ F).)                                | 649-115-00-3 | 295-404-9 | 92045-22-2 |
| Hydrocarbons,<br>C <sub>4</sub> , steam-cracker<br>distillate; Petroleum<br>gas (A complex<br>combination of   | 649-116-00-9 | 295-405-4 | 92045-23-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| hydrocarbons<br>produced by the<br>distillation of the<br>products of a steam<br>cracking process. It<br>consists predominantly<br>of hydrocarbons<br>having a carbon<br>number of C <sub>4</sub> ,<br>predominantly 1-<br>butene and 2-butene,<br>containing also butane<br>and isobutene and<br>boiling in the range of<br>approximately $-12^{\circ}$ C<br>to $5^{\circ}$ C (10.4°F to<br>41°F).) |              |           |            |
| Petroleum gases,<br>liquefied, sweetened,<br>$C_4$ , fraction; Petroleum<br>gas(A complex<br>combination of<br>hydrocarbons obtained<br>by subjecting a<br>liquified petroleum gas<br>mix to a sweetening<br>process to oxidize<br>mercaptans or<br>to remove acidic<br>impurities. It consists<br>predominantly<br>of $C_4$ saturated<br>and unsaturated<br>hydrocarbons.)                          | 649-117-00-4 | 295-463-0 | 92045-80-2 |
| Hydrocarbons, C <sub>4</sub> ,<br>1,3-butadiene- and<br>isobutene-free;<br>Petroleum gas   | 649-118-00-X | 306-004-1 | 95465-89-7 |
| Raffinates (petroleum),<br>steam-cracked $C_4$<br>fraction cuprous<br>ammonium acetate<br>extn., $C_{3-5}$ and $C_{3-5}$<br>5 unsatd., butadiene-<br>free; Petroleum gas   | 649-199-00-5 | 307-769-4 | 97722-19-5 |
| Gases (petroleum),<br>amine system feed;<br>Refinery gas (The<br>feed gas to the amine   | 649-120-00-0 | 270-746-1 | 68477-65-6 |

| Substances   | Index number | EC number | CAS number |
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| substances<br>system for removal<br>of hydrogen sulphide.<br>It consists primarily<br>of hydrogen. Carbon<br>monoxide, carbon<br>dioxide, hydrogen<br>sulphide and aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through $C_5$<br>may also be present.)   | Index number |           |            |
| Gases (petroleum),<br>benzene unit<br>hydrodesulphurizer<br>off; Refinery gas (Off<br>gases produced by<br>the benzene unit. It<br>consists primarily of<br>hydrogen. Carbon<br>monoxide and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>1</sub> through<br>C <sub>6</sub> , including benzene,<br>may also be present.)                 | 649-121-00-6 | 270-747-7 | 68477-66-7 |
| Gases (petroleum),<br>benzene unit recycle,<br>hydrogen-rich;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>obtained by recycling<br>the gases of the<br>benzene unit. It<br>consists primarily of<br>hydrogen with various<br>small amounts of<br>carbon monoxide and<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_{6}$ .) | 649-122-00-1 | 270-748-2 | 68477-67-8 |
| Gases (petroleum),<br>blend oil, hydrogen-<br>nitrogen-rich;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons  | 649-123-00-7 | 270-749-8 | 68477-68-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| obtained by distillation<br>of a blend oil. It<br>consists primarily of<br>hydrogen and nitrogen<br>with various small<br>amounts of carbon<br>monoxide, carbon<br>dioxide, and aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)  |              |           |            |
| Gases (petroleum),<br>catalytic reformed<br>naphtha stripper<br>overheads; Refinery<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from stabilization of<br>catalytic reformed<br>naphtha. It consists<br>of hydrogen<br>and saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_4$ .)  | 649-124-00-2 | 270-759-2 | 68477-77-0 |
| Gases (petroleum),<br>$C_{68}$ catalytic<br>reformer recycle;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of products<br>from catalytic<br>reforming of $C_6$ - $C_8$<br>feed and recycled to<br>conserve hydrogen. It<br>consists primarily of<br>hydrogen. It may also<br>contain various small<br>amounts of carbon<br>monoxide, carbon<br>dioxide, nitrogen, and<br>hydrocarbons having<br>carbon numbers | 649-125-00-8 | 270-761-3 | 68477-80-5 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| predominantly in the range of $C_1$ through $C_{6}$ .)   |              |           |            |
| Gases (petroleum), $C_6$<br><u></u> 8 catalytic reformer;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of products<br>from catalytic<br>reforming of C <sub>6</sub> -C <sub>8</sub><br>feed. It consists of<br>hydrocarbons having<br>carbon numbers in the<br>range of C <sub>1</sub> through C <sub>5</sub><br>and hydrogen.)   | 649-126-00-3 | 270-762-9 | 68477-81-6 |
| Gases (petroleum), C <sub>6</sub><br><u>_8</u> catalytic reformer<br>recycle, hydrogen-<br>rich; Refinery gas  | 649-127-00-9 | 270-763-4 | 68477-82-7 |
| Gases (petroleum),<br>C <sub>2</sub> -return stream;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>extraction of hydrogen<br>from a gas stream<br>which consists<br>primarily of hydrogen<br>with small amounts<br>of nitrogen, carbon<br>monoxide, methane,<br>ethane, and ethylene. It<br>contains predomintly<br>hydrocarbons such<br>as methane, ethane,<br>and ethylene with<br>small amounts of<br>hydrogen, nitrogen and<br>carbonmonoxide.) |              | 270-766-0 | 68477-84-9 |
| Gases (petroleum), dry<br>sour, gas-concnunit-<br>off; Refinery gas (A<br>complex combination<br>of dry gases from a gas<br>concentration unit. It<br>consists of hydrogen,  | 649-129-00-X | 270-774-4 | 68477-92-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| hydrogen sulphide and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{3.}$ )  |              |           |            |
| Gases (petroleum) gas<br>concn. re absorber<br>distn.; Refinery gas (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of products<br>from combined<br>gas streams in a<br>gas concentration<br>reabsorber. It consists<br>predominantly of<br>hydrogen, carbon<br>monoxide, carbon<br>dioxide, nitrogen,<br>hydrogen sulphide and<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_{3.}$ ) | 649-130-00-5 | 270-776-5 | 68477-93-0 |
| Gases (petroleum),<br>hydrogen absorber<br>off; Refinery gas (A<br>complex combination<br>obtained by absorbing<br>hydrogen from<br>a hydrogen rich<br>stream. It consists<br>of hydrogen, carbon<br>monoxide, nitrogen,<br>and methane with<br>small amounts of C <sub>2</sub><br>hydrocarbons.)   | 649-131-00-0 | 270-779-1 | 68477-96-3 |
| Gases (petroleum),<br>hydrogen-rich;<br>Refinery gas (A<br>complex combination<br>separated as a gas<br>from hydrocarbon<br>gases by chilling. It<br>consists primarily of<br>hydrogen with various<br>small amounts of<br>carbon monoxide,   | 649-132-00-6 | 270-780-7 | 68477-97-4 |

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| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| nitrogen, methane and $C_2$ hydrocarbons.)  |              |           |            |
| Gases (petroleum),<br>hydrotreater blend oil<br>recycle, hydrogen-<br>nitrogen-rich; Refinery<br>gas (A complex<br>combination obtained<br>from recycled<br>hydrotreated blend oil.<br>It consists primarily<br>of hydrogen and<br>nitrogen with various<br>small amounts of<br>carbon monoxide,<br>carbon dioxide and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{5.}$ ) | 649-133-00-1 | 270-781-2 | 68477-98-5 |
| Gases (petroleum),<br>recycle, hydrogen-<br>rich; Refinery gas (A<br>complex combination<br>obtained from<br>recycled reactor<br>gases. It consists<br>primarily of hydrogen<br>with various small<br>amounts of carbon<br>monoxide, carbon<br>dioxide, nitrogen,<br>hydrogen sulphide,<br>and saturated aliphatic<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_{5.}$ )                      | 649-134-00-7 | 270-783-3 | 68478-00-2 |
| Gases (petroleum),<br>reformer make-<br>up, hydrogen-rich;<br>Refinery gas (A<br>complex combination<br>obtained from<br>the reformers. It<br>consists primarily<br>of hydrogen with<br>various small amounts<br>of carbon monoxide   | 649-135-00-2 | 270-784-9 | 68478-01-3 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| and aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{5.}$ )  |              |           |            |
| Gases (petroleum),<br>reforming<br>hydrotreater; Refinery<br>gas; (A complex<br>combination obtained<br>from the reforming<br>hydrotreating<br>process. It consists<br>primarily of hydrogen,<br>methane, and ethane<br>with various small<br>amounts of hydrogen<br>sulphide and aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range C <sub>3</sub> through C <sub>5</sub> .)  | 649-136-00-8 | 270-785-4 | 68478-02-4 |
| Gases (petroleum),<br>reforming<br>hydrotreater,<br>hydrogen-methane-<br>rich; Refinery<br>gas (A complex<br>combination obtained<br>from the reforming<br>hydrotreating process.<br>It consists primarily of<br>hydrogen and methane<br>with various small<br>amounts of carbon<br>monoxide, carbon<br>dioxide, nitrogen and<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{5.}$ ) | 649-137-00-3 | 270-787-5 | 68478-03-5 |
| Gases (petroleum),<br>reforming hydrotreater<br>make-up, hydrogen-<br>rich; Refinery<br>gas (A complex<br>combination obtained  | 649-138-00-9 | 270-788-0 | 68478-04-6 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| from the reforming<br>hydrotreating process.<br>It consists primarily<br>of hydrogen with<br>various small amounts<br>of carbon monoxide<br>and aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)   | Index humber |           | CAS humber |
| Gases (petroleum),<br>thermal cracking<br>distn; Refinery gas (A<br>complex combination<br>produced by<br>distillation of products<br>from a thermal<br>cracking process. It<br>consists of hydrogen,<br>hydrogen sulphide,<br>carbon monoxide,<br>carbon dioxide and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .) | 649-139-00-4 | 270-789-6 | 68478-05-7 |
| Tail gas (petroleum),<br>catalytic cracker<br>refractionation<br>absorber; Refinery<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from refractionation<br>of products from a<br>catalytic cracking<br>process. It consists<br>of hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{3.}$ )       | 649-140-00-X | 270-805-1 | 68478-25-1 |
| Tail gas (petroleum),<br>catalytic reformed<br>naphtha separator;<br>Refinery gas (A   | 649-141-00-5 | 270-807-2 | 68478-27-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| complex combination<br>of hydrocarbons<br>obtained from the<br>catalytic reforming<br>of straight-run<br>naphtha. It consists<br>of hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_6$ .)  |              |           |            |
| Tail gas (petroleum),<br>catalytic reformed<br>naphtha stabilizer;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>stabilization of<br>catalytic reformed<br>naphtha. It consists<br>of hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)   | 649-142-00-0 | 270-808-8 | 68478-28-4 |
| Tail gas (petroleum),<br>cracked distillate<br>hydrotreater separator;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>cracked distillates<br>with hydrogen in the<br>presence of a catalyst.<br>It consists of hydrogen<br>and saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .) | 649-143-00-6 | 270-809-3 | 68478-29-5 |
| Tail gas (petroleum),<br>hydrodesulphurized<br>straight-run naphtha<br>separator; Refinery<br>gas (A complex   | 649-144-00-1 | 270-810-9 | 68478-30-8 |
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| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| combination of<br>hydrocarbons<br>obtained from<br>hydrodesulphurization<br>of straight-run<br>naphtha. It consists<br>of hydrogen and<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6.}$  |              |           |            |
| Gases (petroleum),<br>catalytic reformed<br>straight-run naphtha<br>stabilizer overheads;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>catalytic reforming<br>of straight-run<br>naphtha followed<br>by fractionation of<br>the total effluent. It<br>consists of hydrogen,<br>methane, ethane and<br>propane.) | 649-145-00-7 | 270-999-8 | 68513-14-4 |
| Gases (petroleum),<br>reformer effluent high-<br>pressure flash drum<br>off; Refinery gas (A<br>complex combination<br>produced by the high-<br>pressure flashing of<br>the effluent from the<br>reforming reactor. It<br>consists primarily of<br>hydrogen with various<br>small amounts of<br>methane, ethane, and<br>propane.)                       | 649-146-00-2 | 271-003-4 | 68513-18-8 |
| Gases (petroleum),<br>reformer effluent low-<br>pressure flash drum<br>off; Refinery gas (A<br>complex combination<br>produced by low-<br>pressure flashing of  | 649-147-00-8 | 271-005-5 | 68513-19-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| the effluent from the<br>reforming reactor. It<br>consists primarily of<br>hydrogen with various<br>small amounts of<br>methane, ethane, and<br>propane.)   |              |           |            |
| Gases (petroleum),<br>oil refinery gas<br>distn. off; Refinery<br>gas (A complex<br>combination separated<br>by distillation<br>of a gas stream<br>containing hydrogen,<br>carbon monoxide,<br>carbon dioxide and<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_6$ or obtained by<br>cracking ethane and<br>propane. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_1$<br>through $C_2$ , hydrogen,<br>nitrogen, and carbon<br>monoxide.) | 649-148-00-3 | 271-258-1 | 68527-15-1 |
| Gases (petroleum),<br>benzene unit<br>hydrotreater<br>depentanizer<br>overheads; Refinery<br>gas (A complex<br>combination produced<br>by treating the feed<br>from the benzene<br>unit with hydrogen<br>in the presence of<br>a catalyst followed<br>by depentanizing. It<br>consists primarily<br>of hydrogen, ethane<br>and propane with<br>various small<br>amounts of nitrogen,<br>carbon monoxide,<br>carbon dioxide and  | 649-149-00-9 | 271-623-5 | 68602-82-4 |

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|---|--------------|-----------|------------|
| Substances  | Index number | EC number | CAS number |
| hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_6$ . It may contain<br>trace amounts of<br>benzene.)  |              |           |            |
| Gases (petroleum),<br>secondary absorber<br>off, fluidized catalytic<br>cracker overheads<br>fractionator; Refinery<br>gas (A complex<br>combination produced<br>by the fractionation<br>of the overhead<br>products from the<br>catalytic cracking<br>process in the fluidized<br>catalytic cracker. It<br>consists of hydrogen,<br>nitrogen, and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{3.}$ ) | 649-150-00-4 | 271-625-6 | 68602-84-6 |
| Petroleum products,<br>refinery gases;<br>Refinery gas (A<br>complex combination<br>which consists<br>primarily of hydrogen<br>with various small<br>amounts of methane,<br>ethane and propane.)  | 649-151-0-X  | 271-750-6 | 68607-11-4 |
| Gases (petroleum),<br>hydrocracking low-<br>pressure separator;<br>Refinery gas (A<br>complex combination<br>obtained by the liquid-<br>vapor separation of the<br>hydrocracking process<br>reactor effluent. It<br>consists predominantly<br>of hydrogen<br>and saturated<br>hydrocarbons having<br>carbon numbers   | 649-152-00-5 | 272-182-1 | 68783-06-2 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| predominantly in the range of $C_1$ through $C_3$ .)   | inuca number | EC number |            |
| Gases (petroleum),<br>refinery; Refinery<br>gas (A complex<br>combination obtained<br>from various<br>petroleum refining<br>operations. It consists<br>of hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>1</sub> through<br>C <sub>3</sub> .)  | 649-153-00-0 | 272-338-9 | 68814-67-5 |
| Gases (petroleum),<br>platformer products<br>separator off;<br>Refinery gas (A<br>complex combination<br>obtained from the<br>chemical reforming<br>of naphthenes to<br>aromatics. It consists<br>of hydrogen and<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{4.}$ )  | 649-154-00-6 | 272-343-6 | 68814-90-4 |
| Gases (petroleum),<br>hydrotreated sour<br>kerosine depentanizer<br>stabilizer off; Refinery<br>gas (The complex<br>combination obtained<br>from the depentanizer<br>stabilization of<br>hydrotreated kerosine.<br>It consists primarily<br>of hydrogen, methane,<br>ethane, and propane<br>with various small<br>amounts of nitrogen,<br>hydrogen sulphide,<br>carbon monoxide and<br>hydrocarbons having<br>carbon numbers | 649-155-00-1 | 272-775-5 | 68911-58-0 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| predominantly in the range of $C_4$ through $C_5$ .)  |              |           |            |
| Gases (petroleum),<br>hydrotreated sour<br>kerosine flash drum;<br>Refinery gas (A<br>complex combination<br>obtained from the<br>flash drum of the unit<br>treating sour kerosine<br>with hydrogen in the<br>presence of a catalyst.<br>It consists primarily of<br>hydrogen and methane<br>with various small<br>amounts of nitrogen,<br>carbon monoxide, and<br>hydro-carbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{5}$ .) | 649-156-00-7 | 272-776-0 | 68911-59-1 |
| Gases (petroleum),<br>distillate unifiner<br>desulphurization<br>stripper off; Refinery<br>gas (A complex<br>combination stripped<br>from the liquid<br>product of the unifiner<br>desulphurization<br>process. It consists of<br>hydrogen sulphide,<br>methane, ethane, and<br>propane.)   | 649-157-00-2 | 272-873-8 | 68919-01-7 |
| Gases (petroleum),<br>fluidized catalytic<br>cracker fractionation<br>off; Refinery gas (A<br>complex combination<br>produced by the<br>fractionation of the<br>overhead product<br>of the fluidized<br>catalytic cracking<br>process. It consists of<br>hydrogen, hydrogen<br>sulphide, nitrogen, and  | 649-158-00-8 | 272-874-3 | 68919-02-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)   |              |           |            |
| Gases (petroleum),<br>fluidized catalytic<br>cracker scrubbing<br>secondary absorber<br>off; Refinery gas (A<br>complex combination<br>produced by scrubbing<br>the overhead gas from<br>the fluidized catalytic<br>cracker. It consists of<br>hydrogen, nitrogen,<br>methane, ethane and<br>propane.)   | 649-159-00-3 | 272-875-9 | 68919-03-9 |
| Gases (petroleum),<br>heavy distillate<br>hydrotreater<br>desulphurization<br>stripper off; Refinery<br>gas (A complex<br>combination stripped<br>from the liquid<br>product of the heavy<br>distillate hydrotreater<br>desulphurization<br>process. It consists of<br>hydrogen, hydrogen<br>sulphide, and<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{5}$ .) | 649-160-00-9 | 272-876-4 | 68919-04-0 |
| Gases (petroleum),<br>platformer stabilizer<br>off, light ends<br>fractionation; Refinery<br>gas (A complex<br>combination obtained<br>by the fractionation of<br>the light ends of the<br>platinum reactors of<br>the platformer unit. It<br>consists of hydrogen,<br>methane, ethane and<br>propane.)  | 649-161-00-4 | 272-880-6 | 68919-07-3 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Gases (petroleum),<br>preflash tower off,<br>crude distn.; Refinery<br>gas (A complex<br>combination produced<br>from the first tower<br>used in the distillation<br>of crude oil. It consists<br>of nitrogen and<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{5.}$ ) | 649-162-00-X | 272-881-1 | 68919-08-4 |
| Gases (petroleum), tar<br>stripper off; Refinery<br>gas (A complex<br>combination obtained<br>by the fractionation<br>of reduced crude<br>oil. It consists<br>of hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{4}$ .)  | 649-163-00-5 | 272-884-8 | 68919-11-9 |
| Gases (petroleum),<br>unifiner stripper<br>off; Refinery gas<br>(A combination<br>of hydrogen and<br>methane obtained by<br>fractionation of the<br>products from the<br>unifiner unit.)  | 649-164-00-0 | 272-885-3 | 68919-12-0 |
| Tail gas (petroleum),<br>catalytic<br>hydrodesulphurized<br>naphtha separator;<br>Refinery gas (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>hydrodesulphurization<br>of naphtha. It consists<br>of hydrogen, methane,<br>ethane, and propane.)  | 649-165-00-6 | 273-173-5 | 68952-79-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Tail gas (petroleum),<br>straight-run naphtha<br>hydrodesulphurizer;<br>Refinery gas (A<br>complex combination<br>obtained from the<br>hydrodesulphurization<br>of straight-run<br>naphtha. It consists<br>of hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)   | 649-166-00-1 | 273-174-0 | 68952-80-7 |
| Gases (petroleum),<br>sponge absorber off,<br>fluidized catalytic<br>cracker and gas<br>oil desulphurizer<br>overhead fractionation;<br>Refinery gas (A<br>complex combination<br>obtained by the<br>fractionation of<br>products from the<br>fluidized catalytic<br>cracker and gas<br>oil desulphurizer.<br>It consists of<br>hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{4}$ .) | 649-167-00-7 | 273-269-7 | 68955-33-9 |
| Gases (petroleum),<br>crude distn. and<br>catalytic cracking;<br>Refinery gas (A<br>complex combination<br>produced by crude<br>distillation and<br>catalytic cracking<br>processes. It consists<br>of hydrogen, hydrogen<br>sulphide, nitrogen,<br>carbon monoxide and<br>paraffinic and olefinic<br>hydrocarbons having   | 649-168-00-2 | 273-563-5 | 68989-88-8 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6.}$ )  |              |           |            |
| Gases (petroleum),<br>gas oil diethanolamine<br>scrubber off; Refinery<br>gas (A complex<br>combination produced<br>by desulphurization<br>of gas oils with<br>diethanolamine. It<br>consists predominantly<br>of hydrogen sulphide,<br>hydrogen and aliphatic<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_5$ .)  | 649-169-00-8 | 295-397-2 | 92045-15-3 |
| Gases (petroleum),<br>gas oil<br>hydrodesulphurization<br>effluent; Refinery<br>gas (A complex<br>combination obtained<br>by separation of the<br>liquid phase from<br>the effluent from<br>the hydrogenation<br>reaction. It consists<br>predominantly of<br>hydrogen, hydrogen<br>sulphide and aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{3.}$ ) | 649-170-00-3 | 295-398-8 | 92045-16-4 |
| Gases (petroleum),<br>gas oil<br>hydrodesulphurization<br>purge; Refinery gas (A<br>complex combination<br>of gases obtained<br>from the reformer and<br>from the purges from<br>the hydrogenation<br>reactor. It consists<br>predominantly of<br>hydrogen and aliphatic  | 649-171-00-9 | 295-399-3 | 92045-17-5 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_4$ .)   |              |           |            |
| Gases (petroleum),<br>hydrogenator effluent<br>flash drum off;<br>Refinery gas (A<br>complex combination<br>of gases obtained<br>from flash of the<br>effluents after the<br>hydrogenation<br>reaction. It consists<br>predominantly of<br>hydrogen and aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)  | 649-172-00-4 | 295-400-7 | 92045-18-6 |
| Gases (petroleum),<br>naphtha steam<br>cracking high-pressure<br>residual; Refinery<br>gas (A complex<br>combination obtained<br>as a mixture of the<br>non-condensable<br>portions from the<br>product of a naphtha<br>steam cracking process<br>as well as residual<br>gases obtained during<br>the preparation of<br>subsequent products. It<br>consists predominantly<br>of hydrogen and<br>paraffinic and olefinic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through $C_5$<br>with which natural gas<br>may also be mixed.) | 649-173-00-X | 295-401-2 | 92045-19-7 |
| Gases (petroleum),<br>esidue visbaking  | 649-174-00-5 | 295-402-8 | 92045-20-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| obtained from<br>viscosity reduction<br>of residues in a<br>furnace. It consists<br>predominantly of<br>hydrogen sulphide and<br>paraffinic and olefinic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)  |              |           |            |
| Foots oil (petroleum),<br>acid-treated; Foots<br>oil (A complex<br>combination of<br>hydrocarbons obtained<br>by treatment of Foot's<br>oil with sulphuric<br>acid. It consists<br>predominantly of<br>branched-chain<br>hydrocarbons with<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ .)   | 649-175-00-0 | 300-225-7 | 93924-31-3 |
| Foots oil (petroleum),<br>clay-treated; Foots<br>oil (A complex<br>combination of<br>hydrocarbons obtained<br>by treatment of Foot's<br>oil with natural or<br>modified clay in<br>either a contacting or<br>percolation process<br>to remove the trace<br>amounts of polar<br>compounds and<br>impurities present. It<br>consists predominantly<br>of branched chain<br>hydrocarbons with<br>carbon numbers<br>predominantly in the | 649-176-00-6 | 300-226-2 | 93924-32-4 |
| range of $C_{20}$ through $C_{50}$ .)  |              |           |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| complex combination<br>of hydrocarbons<br>produced by<br>distillation of products<br>from the cracking of<br>crude oil. It consists of<br>hydrocarbons having<br>carbon numbers in the<br>range of C <sub>3</sub> through<br>C <sub>4</sub> , predominantly<br>of propane and<br>propylene, and<br>poiling in the range of<br>approximately $-51^{\circ}$ C<br>o $-1^{\circ}$ C ( $-60^{\circ}$ F to<br>$30^{\circ}$ F).)          |              |           |            |
| Fail gas (petroleum),<br>catalytic cracked<br>distillate and catalytic<br>cracked naphtha<br>fractionation absorber;<br>Petroleum gas (The<br>complex combination<br>of hydrocarbons from<br>he distillation of the<br>products from catalytic<br>cracked distillates<br>and catalytic cracked<br>naphtha. It consists<br>predominantly of<br>nydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_{4.}$ ) | 649-178-00-7 | 269-617-2 | 68307-98-2 |
| Fail gas (petroleum),<br>eatalytic polymn.<br>haphtha fractionation<br>stabilizer; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons from<br>he fractionation<br>stabilization products<br>from polymerization<br>of naphtha. It consists<br>predominantly of<br>hydrocarbons having<br>earbon numbers in the<br>ange of $C_1$ through<br>$C_{4.}$ )   | 649-179-00-2 | 269-618-8 | 68307-99-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Tail gas (petroleum),<br>catalytic reformed<br>naphtha fractionation<br>stabilizer, hydrogen<br>sulphide-free;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>fractionation<br>stabilization of<br>catalytic reformed<br>naphtha and from<br>which hydrogen<br>sulphide has been<br>removed by amine<br>treatment. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{4.}$ | 649-180-00-8 | 269-619-3 | 68308-00-9 |
| Tail gas (petroleum),<br>cracked distillate<br>hydrotreater stripper;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>thermal cracked<br>distillates with<br>hydrogen in the<br>presence of a<br>catalyst. It consists<br>predominantly<br>of saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)  | 649-181-00-3 | 269-620-9 | 68308-01-0 |
| Tail gas (petroleum),<br>straight-run distillate<br>hydrodesulphurizer,<br>hydrogen sulfide-<br>free; Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from catalytic  | 649-182-00-9 | 269-630-3 | 68308-10-1 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Substances<br>hydrodesulphurization<br>of straight run<br>distillates and from<br>which hydrogen<br>sulphide has been<br>removed by amine<br>treatment. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>1</sub> through<br>C <sub>4</sub> .)  | Index number | EC number | CAS humber |
| Tail gas (petroleum),<br>gas oil catalytic<br>cracking absorber;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>the distillation of<br>products from the<br>catalytic cracking of<br>gas oil. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{5}$ .) | 649-183-00-4 | 269-623-5 | 68308-03-2 |
| Tail gas (petroleum),<br>gas recovery plant;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>from the distillation<br>of products from<br>miscellaneous<br>hydrocarbon<br>streams. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)                                | 649-184-00-X | 269-624-0 | 68308-04-3 |
| Tail gas (petroleum),<br>gas recovery plant<br>deethanizer; Petroleum<br>gas (A complex   | 649-185-00-5 | 269-625-6 | 68308-05-4 |
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| Substances               | Index number | EC number | CAS number |
|--------------------------|--------------|-----------|------------|
| combination of           |              |           |            |
| hydrocarbons from the    |              |           |            |
| distillation of products |              |           |            |
| from miscellaneous       |              |           |            |
| hydrocarbon streams.     |              |           |            |
| It consists of           |              |           |            |
| hydrocarbon having       |              |           |            |
| carbon numbers           |              |           |            |
| predominantly in the     |              |           |            |

| carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_4$ .)  |              |           |            |
|---|--------------|-----------|------------|
| Tail gas (petroleum),<br>hydrodesulphurized<br>distillate and<br>hydrodesulphurized<br>naphtha fractionator<br>acid-free; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from fractionation of<br>hydrodesulphurized<br>naphtha and distillate<br>hydrocarbon streams<br>and treated to<br>remove acidic<br>impurities, It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{5}$ .) | 649-186-00-0 | 269-626-1 | 68308-06-5 |
| Tail gas (petroleum),<br>hydrodesulphurized<br>vacuum gas oil<br>stripper, hydrogen<br>sulphide-free;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>stripping stabilization<br>of catalytic<br>hydrodesulphurized<br>vacuum gas oil and<br>from which hydrogen<br>sulphide has been<br>removed by amine<br>treatment. It consists   | 649-187-00-6 | 269-627-7 | 68308-07-6 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)   |              |           |            |
| Tail gas (petroleum),<br>light straight-run<br>naphtha stabilizer,<br>hydrogen sulphide-<br>free; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from fractionation<br>stabilization of<br>light straight-run<br>naphtha and from<br>which hydrogen<br>sulphide has been<br>removed by amine<br>treatment. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>1</sub> through<br>$C_{5}$ .) | 649-188-00-1 | 269-629-8 | 68308-09-8 |
| Tail gas (petroleum),<br>propane-propylene<br>alkylation feed prep<br>deethanizer; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from the distillation<br>of the reaction<br>products of propane<br>with propylene.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{4.}$ )  | 649-189-00-7 | 269-631-9 | 68308-11-2 |
| Tail gas (petroleum),<br>vacuum gas oil<br>hydrodesulphurizer,<br>hydrogen sulphide-<br>free; Petroleum gas (A  | 649-190-00-2 | 269-632-4 | 68308-12-3 |
| ,   |              | 117       |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| complex combination<br>of hydrocarbons<br>obtained from catalytic<br>hydrodesulphurization<br>of vacuum gas oil and<br>from which hydrogen<br>sulphide has been<br>removed by amine<br>treatment. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_{6}$ .)   |              |           |            |
| Gases (petroleum),<br>catalytic cracked<br>overheads; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of<br>products from the<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_3$<br>through $C_5$ and<br>boiling in the range of<br>approximately $-48^{\circ}$ C<br>to $32^{\circ}$ C ( $-54^{\circ}$ F to<br>$90^{\circ}$ F).) | 649-191-00-8 | 270-071-2 | 68409-99-4 |
| Natural gas, dried;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>separated from natural<br>gas. It consists of<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_1$ through<br>$C_4$ , predominantly<br>methane and ethane.)   | 649-192-00-3 | 270-085-9 | 68410-63-9 |
| Alkanes, $C_{1-2}$ ;<br>Petroleum gas  | 649-193-00-9 | 270-651-5 | 68475-57-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Alkanes, C <sub>2—3</sub> ;  | 649-194-00-4 | 270-652-0 | 68475-58-1 |
| Petroleum gas<br>Alkanes, $C_{3-4}$ ;  | 649-195-00-X | 270-653-6 | 68475-59-2 |
| Petroleum gas  |              |           |            |
| Alkanes, C <sub>4—5</sub> ;<br>Petroleum gas   | 649-196-00-5 | 270-654-1 | 68475-60-5 |
| Fuel gases; Petroleum<br>gas (A combination of<br>light gases. It consists<br>predominantly of<br>hydrogen and/or low<br>molecular weight<br>hydrocarbons.)  | 649-197-00-0 | 270-667-2 | 68476-26-6 |
| Fuel gases, crude<br>oil of distillates;<br>Petroleum gas (A<br>complex combination<br>of light gases produced<br>by distillation of<br>crude oil and by<br>catalytic reforming of<br>naphtha. It consists<br>of hydrogen and<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_1$<br>through $C_4$ and<br>boiling in the range of<br>approximately -217°C<br>to -12°C (-423°F to<br>10°F).) | 649-198-00-6 | 270-670-9 | 68476-29-9 |
| Hydrocarbons, C <sub>3—4</sub> ;<br>Petroleum gas  | 649-199-00-1 | 270-681-9 | 68476-40-4 |
| Hydrocarbons, C <sub>4—5</sub> ;<br>Petroleum gas  | 649-200-00-5 | 270-682-4 | 68476-42-6 |
| Hydrocarbons, C <sub>2-4</sub> ,<br>C <sub>3</sub> -rich; Petroleum gas  | 649-201-00-0 | 270-689-2 | 68476-49-3 |
| Petroleum gases,<br>liquefied; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having   | 649-202-00-6 | 270-704-2 | 68476-85-7 |

| S-h-t   | T., J.,      | ECanada   | CAS        |
|---|--------------|-----------|------------|
| Substances<br>carbon numbers<br>predominantly in<br>the range of $C_3$<br>through $C_7$ and<br>boiling in the range of<br>approximately $-40^{\circ}$ C<br>to $80^{\circ}$ C ( $-40^{\circ}$ F to<br>$176^{\circ}$ F).)   | Index number | EC number | CAS number |
| Petroleum gases,<br>liquefied, sweetened;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>liquefied petroleum<br>gas mix to a<br>sweetening process to<br>convert mercaptans<br>or to remove<br>acidic impurities.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_3$<br>through $C_7$ and<br>boiling in the range of<br>approximately $-40^{\circ}$ C<br>to $80^{\circ}$ C ( $-40^{\circ}$ F to<br>$176^{\circ}$ F).) | 649-203-00-1 | 270-705-8 | 68476-86-8 |
| Gases (petroleum),<br>$C_{3-4}$ , isobutane-<br>rich; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons from the<br>distillation of saturated<br>and unsaturated<br>hydrocarbons<br>usually ranging in<br>carbon numbers<br>from C <sub>3</sub> through C <sub>6</sub> ,<br>predominantly butane<br>and isobutane. It<br>consists of saturated<br>and unsaturated<br>hydrocarbons having<br>carbon numbers in the<br>range of C <sub>3</sub> through  | 649-204-00-7 | 270-724-1 | 68477-33-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| C <sub>4</sub> , predominantly sobutane.)  |              |           |            |
| Distillates (petroleum),<br>$C_{36}$ , piperylene-<br>rich; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons from the<br>distillation of saturated<br>and unsaturated<br>aliphatic hydrocarbons<br>usually ranging in<br>the carbon numbers<br>$C_3$ through $C_6$ . It<br>consists of saturated<br>and unsaturated<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_3$ through<br>$C_6$ , predominantly<br>piperylenes.) | 649-205-00-2 | 270-726-2 | 68477-35-0 |
| Gases (petroleum),<br>utane splitter<br>verheads; Petroleum<br>as (A complex<br>ombination of<br>ydrocarbons obtained<br>com the distillation<br>f the butane stream.<br>consists of aliphatic<br>ydrocarbons having<br>arbon numbers<br>redominantly in the<br>ange of $C_3$ through<br>$C_4$ .)  | 649-206-00-8 | 270-750-3 | 68477-69-0 |
| Gases (petroleum), C <sub>2</sub><br>3; Petroleum gas(A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of<br>products from a<br>catalytic fractionation<br>process. It contains<br>predominantly ethane,<br>ethylene, propane, and<br>propylene.)  | 649-207-00-3 | 270-751-9 | 68477-70-3 |
| Gases (petroleum),<br>atalytic-cracked   | 649-208-00-9 | 270-752-4 | 68477-71-4 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| gas oil depropanizer<br>bottoms, $C_4$ -rich<br>acid-free; Petroleum<br>gas (A complex<br>combination of<br>hydrocarbons obtained<br>from fractionation<br>of catalytic cracked<br>gas oil hydrocarbon<br>stream and treated<br>to remove hydrogen<br>sulphide and other<br>acidic components.<br>It consists of<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_3$ through<br>$C_5$ , predominantly $C_4$ .) |              |           |            |
| Gases (petroleum),<br>catalytic-cracked<br>naphtha debutanizer<br>bottoms, $C_{3-5}$ -rich;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>stabilization of<br>catalytic cracked<br>naphtha. It consists<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>3</sub> through<br>C <sub>5</sub> .)                                     | 649-209-00-4 | 270-754-5 | 68477-72-5 |
| Tail gas (petroleum),<br>isomerized naphtha<br>fractionation stabilizer;<br>Petroleum gas (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>the fractionation<br>stabilization products<br>from isomerized<br>naphtha. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the   | 649-210-00-X | 269-628-2 | 68308-08-7 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| range of $C_1$ through $C_4$ .)   |              |           |            |
| Foots oil (petroleum),<br>carbon-treated; Foot's<br>oil (A complex<br>combination of<br>hydrocarbons obtained<br>by the treatment<br>of Foot's oil with<br>activated carbon<br>for the removal of<br>trace constituents and<br>impurities. It consists<br>predominantly of<br>saturated straight chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .)  | 649-211-00-5 | 308-126-0 | 97862-76-5 |
| Distillates (petroleum),<br>sweetened middle;<br>Gas oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>by subjecting a<br>petroleum distillate to<br>a sweetening process<br>to convert mercaptans<br>or to remove<br>acidic impurities.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>9</sub><br>through C <sub>20</sub> and<br>boiling in the range of<br>approximately 150°C<br>to 345°C (302°F to<br>653°F).) | 649-212-00-0 | 265-088-7 | 64741-86-2 |
| Gas oils (petroleum),<br>solvent-refined; Gas<br>oil unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>raffinate from a<br>solvent extraction<br>process. It consists  | 649-213-00-6 | 265-092-9 | 64741-90-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| predominantly<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{25}$ and<br>boiling in the range of<br>approximately 205°C<br>to 400°C (401°F to<br>752°F).)  |              |           |            |
| Distillates (petroleum),<br>solvent-refined<br>middle; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>raffinate from a<br>solvent extraction<br>process. It consists<br>predominantly<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>9</sub><br>through C <sub>20</sub> and<br>boiling in the range of<br>approximately 150°C<br>to 345°C (302°F to<br>653°F).) | 649-214-00-1 | 265-093-4 | 64741-91-9 |
| Gas oils (petroleum),<br>acid-treated; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as a<br>raffinate from a<br>sulphuric acid treating<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{13}$<br>through $C_{25}$ and<br>boiling in the range of<br>approximately 230°C<br>to 400°C (446°F to<br>752°F).)   | 649-215-00-7 | 265-112-6 | 64742-12-7 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Distillates (petroleum),<br>acid-treated middle;<br>Gas oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>as a raffinate from a<br>sulphuric acid treating<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{20}$ and<br>boiling in the range of<br>approximately 205°C<br>to 345°C (401°F to<br>653°F).)             |              | 265-113-1 | 64742-13-8 |
| Distillates (petroleum),<br>acid-treated light; Gas<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as a<br>raffinate from a<br>sulphuric acid treating<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>9</sub><br>through C <sub>16</sub> and<br>boiling in the range of<br>approximately 150°C<br>to 290°C (302°F to<br>554°F).) | 649-217-00-8 | 265-114-7 | 64742-14-9 |
| Gas oils (petroleum),<br>chemically<br>neutralized; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by a<br>treating process<br>to remove acidic<br>materials. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{13}$  | 649-218-00-3 | 265-129-9 | 64742-29-6 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| through $C_{25}$ and<br>boiling in the range of<br>approximately 230°C<br>to 400°C (446°F to<br>752°F).)  |              |           |            |
| Distillates (petroleum),<br>chemically neutralized<br>middle; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by a<br>treating process<br>to remove acidic<br>materials. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{20}$ and<br>boiling in the range of<br>approximately 205°C<br>to 345°C (401°F to<br>653°F).)  | 649-219-00-9 | 265-130-4 | 64742-30-9 |
| Distillates (petroleum),<br>clay-treated middle;<br>Gas oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons resulting<br>from treatment of a<br>petroleum fraction<br>with natural or<br>modified clay, usually<br>in a percolation<br>process to remove<br>the trace amounts<br>of polar compounds<br>and impurities<br>present. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>9</sub><br>through C <sub>20</sub> and<br>boiling in the range of<br>approximately 150°C<br>to 345°C (302°F to<br>653°F).) | 649-220-00-4 | 265-139-3 | 64742-38-7 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Distillates (petroleum)<br>hydrotreated<br>middle; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction<br>with hydrogen in<br>the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{25}$ and<br>boiling in the range of<br>approximately 205°C<br>to 400°C (401°F to<br>752°F).)   | 649-221-00-X | 265-148-2 | 64742-46-7 |
| Gas oils (petroleum),<br>hydrodesulphurized;<br>Gas oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>from a petroleum<br>stock by treating<br>with hydrogen to<br>convert organic<br>sulphur to hydrogen<br>sulphide which is<br>removed. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{13}$<br>through $C_{25}$ and<br>boiling in the range of<br>approximately 230°C<br>to 400°C (446°F to<br>752°F).) | 649-222-00-5 | 265-182-8 | 64742-79-6 |
| Distillates (petroleum),<br>hydrodesulphurized<br>middle; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from a  | 649-223-00-0 | 265-183-3 | 64742-80-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| petroleum stock by<br>treating with hydrogen<br>to convert organic<br>sulphur to hydrogen<br>sulphide which is<br>removed. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{25}$ and<br>boiling in the range of<br>approximately 205°C<br>to 400°C (401°F to<br>752°F).) |              |           |            |
| Distillates (petroleum),<br>catalytic reformer<br>fractionator residue,<br>high-boiling; Gas<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons from<br>the distillation of<br>catalytic reformer<br>fractionator residue.<br>It boils in the range of<br>approximately 343°C<br>to 399°C (650°F to<br>750°F).)                | 649-228-00-8 | 270-719-4 | 68477-29-2 |
| Distillates (petroleum),<br>catalytic reformer<br>fractionator residue,<br>intermediate-<br>boiling; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons from<br>the distillation of<br>catalytic reformer<br>fractionator residue.<br>It boils in the range of<br>approximately 288°C<br>to 371°C (550°F to<br>700°F).)   | 649-229-00-3 | 270-721-5 | 68477-30-5 |
| Distillates (petroleum),<br>catalytic reformer<br>fractionator residue,<br>low-boiling; Gas oil<br>—unspecified (The<br>complex combination   | 649-230-00-9 | 270-722-0 | 68477-31-6 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| of hydrocarbons from<br>the distillation of<br>catalytic reformer<br>fractionator residue.<br>It boils approximately<br>below 288°C (550°F).)   |              |           |            |
| Distillates (petroleum),<br>highly refined middle;<br>Gas oil unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>by the subjection<br>of a petroleum<br>fraction to several<br>of the following<br>steps: filtration,<br>centrifugation,<br>atmospheric<br>distillation,<br>vacuum distillation,<br>acidification,<br>neutralization and clay<br>treatment. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{10}$ through<br>$C_{20}$ .) | 649-231-00-4 | 292-615-8 | 90640-93-0 |
| Distillates (petroleum)<br>catalytic reformer,<br>heavy arom.<br>conc.; Gas oil—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>distillation of a<br>catalytically reformed<br>petroleum cut. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{10}$<br>through $C_{16}$ and<br>boiling in the range of<br>approximately 200°C  | 649-232-00-X | 295-294-2 | 91995-34-5 |

| Substances<br>to 300°C (392°F to   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| 572°F).)   |              |           |            |
| Gas oils, paraffinic;<br>Gas oil— unspecified<br>(A distillate obtained<br>from the redistillation<br>of a complex<br>combination of<br>hydrocarbons obtained<br>by the distillation of<br>the effluents from<br>a severe catalytic<br>hydrotreatment of<br>paraffins. It boils<br>in the range of<br>approximately 190°C<br>to 330°C (374°F to<br>594°F).)  | 649-233-00-5 | 300-227-8 | 93924-33-5 |
| Naphtha (petroleum),<br>solvent-refined<br>hydrodesulphurized<br>heavy; Gas oil—<br>unspecified  | 649-234-00-0 | 307-035-3 | 97488-96-5 |
| Hydrocarbons, $C_{16}$<br>$_{20}$ , hydrotreated<br>middle distillate,<br>distn. lights; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as first<br>runnings from the<br>vacuum distillation<br>of effluents from<br>the treatment of a<br>middle distillate with<br>hydrogen. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{16}$<br>through $C_{20}$ and<br>boiling in the range of<br>approximately 290°C<br>to 350°C (554°F to<br>662°F). It produces a<br>finished oil having a<br>viscosity of 2 cSt at<br>100°C (212°F).) | 649-235-00-6 | 307-659-6 | 97675-85-9 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Hydrocarbons, $C_{12}$<br>$_{-20}$ , hydrotreated<br>paraffinic, distn.<br>lights; Gas oil—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as first<br>runnings from the<br>vacuum distillation<br>of effluents from<br>the treatment of<br>heavy paraffins<br>with hydrogen in<br>the presence of a<br>catalyst. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>12</sub><br>through C <sub>20</sub> and<br>boiling in the range of<br>approximately 230°C<br>to 350°C (446°F to<br>662°F). It produces a<br>finished oil having a<br>viscosity of 2 cSt at<br>100°C (212°F).) | 649-236-00-1 | 307-660-1 | 97675-86-0 |
| Hydrocarbons, $C_{11}$<br>17, solvent-extd.<br>light naphthenic; Gas<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by extraction<br>of the aromatics from<br>a light naphthenic<br>distillate having<br>a viscosity of<br>2.2 cSt at 40°C<br>(104°F). It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{17}$ and<br>boiling in the range of<br>approximately 200°C  | 649-237-00-7 | 307-757-9 | 97722-08-2 |

| Substances<br>to 300°C (392°F to   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| 572°F).)   |              |           |             |
| Gas oils, hydrotreated;<br>Gas oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons<br>obtained from the<br>redistillation of the<br>effluents from the<br>treatment of paraffins<br>with hydrogen in<br>the presence of a<br>catalyst. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{17}$<br>through $C_{27}$ and<br>boiling in the range of<br>approximately 330°C<br>to 340°C (626°F to<br>644°F).) | 649-238-00-2 | 308-128-1 | 97862-78-7  |
| Distillates (petroleum),<br>carbon-treated light<br>paraffinic; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of a<br>petroleum oil fraction<br>with activated charcoal<br>for the removal<br>of traces of polar<br>constituents and<br>impurities. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{12}$ through<br>$C_{28}$ .)                              | 649-239-00-8 | 309-667-5 | 100683-97-4 |
| Distillates (petroleum),<br>intermediate<br>paraffinic, carbon-<br>treated; Gas oil<br>unspecified (A<br>complex combination   | 649-240-00-3 | 309-668-0 | 100683-98-5 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| of hydrocarbons<br>obtained by the<br>treatment of petroleum<br>with activated<br>charcoal for the<br>removal of trace<br>polar constituents and<br>impurities. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{16}$ through<br>$C_{36}$ .)   |              |           |             |
| Distillates (petroleum),<br>intermediate<br>paraffinic, clay-<br>treated; Gas oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of petroleum<br>with bleaching earth<br>for the removal<br>of trace polar<br>constituents and<br>impurities. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{16}$ through<br>$C_{36}$ .) | 649-241-00-9 | 309-669-6 | 100683-99-6 |
| Alkanes, $C_{12-26}$ —<br>branched and linear;   | 649-242-00-4 | 292-454-3 | 90622-53-0  |
| Lubricating greases;<br>Grease(A complex<br>combination of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{12}$<br>through $C_{50}$ . May<br>contain organic salts<br>of alkali metals,<br>alkaline earth metals,<br>and/or aluminium<br>compounds.)  | 649-243-00-X | 278-011-7 | 74869-21-9  |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Slack wax<br>(petroleum); Slack<br>wax (A complex<br>combination of<br>hydrocarbons obtained<br>from a petroleum<br>fraction by solvent<br>crystallization (solvent<br>dewaxing) or as a<br>distillation fraction<br>from a very waxy<br>crude. It consists<br>predominantly of<br>saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>20</sub> .) | 649-244-00-5 | 265-165-5 | 64742-61-6 |
| Slack wax<br>(petroleum), acid-<br>treated; Slack wax (A<br>complex combination<br>of hydrocarbons<br>obtained as a raffinate<br>by treatment of a<br>petroleum slack<br>wax fraction with<br>sulphuric acid treating<br>process. It consists<br>predominantly of<br>saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ .)                      | 649-245-00-0 | 292-659-8 | 90669-77-5 |
| Slack wax<br>(petroleum), clay-<br>treated; Slack wax (A<br>complex combination<br>of hydrocarbons<br>obtained by treatment<br>of a petroleum<br>slack wax fraction<br>with natural or<br>modified clay in<br>either a contacting or<br>percolation process. It<br>consists predominantly  | 649-246-00-6 | 292-660-3 | 90669-78-6 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| of saturated straight<br>and branched<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ .)   |              |           |            |
| Slack wax<br>(petroleum),<br>hydrotreated; Slack<br>wax (A complex<br>combination of<br>hydrocarbons obtained<br>by treating slack<br>wax with hydrogen<br>in the presence of a<br>catalyst. It consists<br>predominantly of<br>saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>20</sub> .) | 649-247-00-1 | 295-523-6 | 92062-09-4 |
| Slack wax<br>(petroleum), low-<br>melting; Slack<br>wax (A complex<br>combination of<br>hydrocarbons obtained<br>from a petroleum<br>fraction by solvent<br>deparaffination. It<br>consists predominantly<br>of saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .)                        | 649-248-00-7 | 295-524-1 | 92062-10-7 |
| Slack wax<br>(petroleum), low-<br>melting, hydrotreated;<br>Slack wax (A<br>complex combination<br>of hydrocarbons<br>obtained by treatment<br>of low-melting<br>petroleum slack wax<br>with hydrogen in<br>the presence of a   | 649-249-00-2 | 295-525-7 | 92062-11-8 |

|  | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| catalyst. It consists<br>predominantly of<br>saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .)  |              |           |            |
| Slack wax<br>(petroleum), low-<br>melting, carbon-<br>treated; Slack wax (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of low-<br>melting slack wax with<br>activated carbon for<br>the removal of trace<br>polar constituents<br>and impurities. It<br>consists predominantly<br>of saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .) | 649-250-00-8 | 308-155-9 | 97863-04-2 |
| Slack wax<br>(petroleum), low-<br>melting, clay-treated;<br>Slack wax (A complex<br>combination of<br>hydrocarbons obtained<br>by the treatment<br>of low-melting<br>petroleum slack wax<br>with bentonite for<br>removal of trace<br>polar constituents<br>and impurities. It<br>consists predominantly<br>of saturated straight<br>and branched chain  | 649-251-00-3 | 308-156-4 | 97863-05-3 |
| hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .)   |              |           |            |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| melting, silicic acid-<br>treated; Slack wax (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of low-<br>melting petroleum<br>slack wax with silicic<br>acid for the removal of<br>trace polar constituents<br>and impurities. It<br>consists predominantly<br>of saturated straight<br>and branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .) |              |           |             |
| Slack wax<br>(petroleum), carbon-<br>treated; Slack wax (A<br>complex combination<br>of hydrocarbons<br>obtained by treatment<br>of petroleum slack<br>wax with activated<br>charcoal for the<br>removal of trace<br>polar constituents and<br>impurities.)  | 649-253-00-4 | 309-723-9 | 100684-49-9 |
| Petrolatum; Petrolatum<br>(A complex<br>combination of<br>hydrocarbons obtained<br>as a semi-solid from<br>dewaxing paraffinic<br>residual oil. It consists<br>predominantly<br>of saturated<br>crystalline and liquid<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>25</sub> .)  | 649-254-00-X | 232-373-2 | 8009-03-8   |
| Petrolatum<br>(petroleum), oxidized;<br>Petrolatum (A<br>complex combination<br>of organic compounds,<br>predominantly high  | 649-255-00-5 | 265-206-7 | 64743-01-7  |

| <u>C</u> 1   | T. J         | EC        | CAG        |
|--|--------------|-----------|------------|
| Substances<br>molecular weight<br>carboxylic acids,<br>obtained by the<br>air oxidation of<br>petrolatum.)   | Index number | EC number | CAS number |
| Petrolatum<br>(petroleum), alumina-<br>treated; Petrolatum (A<br>complex combination<br>of hydrocarbons<br>obtained when<br>petrolatum is treated<br>$A1_2 O_3$ to remove<br>polar components<br>and impurities. It<br>consists predominantly<br>of saturated,<br>crystalline, and liquid<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>25</sub> .)                                     | 649-256-00-0 | 285-098-5 | 85029-74-9 |
| Petrolatum<br>(petroleum),<br>hydrotreated;<br>Petrolatum (A<br>complex combination<br>of hydrocarbons<br>obtained as a semi-<br>solid from dewaxed<br>paraffinic residual oil<br>treated with hydrogen<br>in the presence of a<br>catalyst. It consists<br>predominantly<br>of saturated,<br>microcrystalline,<br>and liquid<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>20</sub> .) | 649-257-00-6 | 295-459-9 | 92045-77-7 |
| Petrolatum<br>(petroleum), carbon-<br>treated; Petrolatum (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of petroleum<br>petrolatum with   | 649-258-00-1 | 308-149-6 | 97862-97-0 |
|  |              | 120       |            |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| activated carbon for<br>the removal of trace<br>polar constituents<br>and impurities. It<br>consists predominantly<br>of saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{20}$ .)   |              |           |             |
| Petrolatum<br>(petroleum), silicic<br>acid-treated;<br>Petrolatum (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of petroleum<br>petrolatum with silicic<br>acid for the removal of<br>trace polar constituents<br>and impurities. It<br>consists predominantly<br>of saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>20</sub> .) | 649-259-00-7 | 308-150-1 | 97862-98-1  |
| Petrolatum<br>(petroleum), clay-<br>treated; Petrolatum (A<br>complex combination<br>of hydrocarbons<br>obtained by treatment<br>of petrolatum with<br>bleaching earth for the<br>removal of traces of<br>polar constituents and<br>impurities. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of greater than<br>$C_{25}$ .)                   | 649-260-00-2 | 309-706-6 | 100684-33-1 |
| Gasoline, natural;<br>Low boiling point<br>naphtha (A complex<br>combination of<br>hydrocarbons  | 649-261-00-8 | 232-349-1 | 8006-61-9   |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| separated from natural<br>gas by processes such<br>as refrigeration or<br>absorption. It consists<br>predominantly of<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_8$ and<br>boiling in the range of<br>approximately -20°C<br>to 120°C (-4°F to<br>248°F).)                          |              |           |            |
| Naphtha; Low<br>boiling point<br>naphtha (Refined,<br>partly refined, or<br>unrefined petroleum<br>products by the<br>distillation of natural<br>gas. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_6$ and<br>boiling in the range of<br>approximately 100°C<br>to 200°C (212°F to<br>392°F).) | 649-262-00-3 | 232-443-2 | 8030-30-6  |
| Ligroine; Low boiling<br>point naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>fractional distillation<br>of petroleum.<br>This fraction<br>boils in a range of<br>approximately 20°C<br>to 135°C (58°F to<br>275°F).)  | 649-263-00-9 | 232-453-7 | 8032-32-4  |
| Naphtha (petroleum),<br>heavy straight-<br>run; Low boiling<br>point naphtha (A<br>complex combination<br>of hydrocarbons  | 649-264-00-4 | 265-041-0 | 64741-41-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| produced by<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 65°C<br>to 230°C (149°F to<br>446°F).)   |              |           |            |
| Naphtha (petroleum),<br>full-range straight-<br>run; Low boiling<br>point naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>11</sub> and<br>boiling in the range of<br>approximately $-20^{\circ}$ C<br>to $220^{\circ}$ C ( $-4^{\circ}$ F to<br>$428^{\circ}$ F).)          | 649-265-00-X | 265-042-6 | 64741-42-0 |
| Naphtha (petroleum),<br>light straight-<br>run; Low boiling<br>point naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of crude<br>oil. It consists<br>predominantly<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{10}$ and<br>boiling in the range of<br>approximately $-20^{\circ}$ C<br>to $180^{\circ}$ C ( $-4^{\circ}$ F to<br>$356^{\circ}$ F).) | 649-266-00-5 | 265-046-8 | 64741-46-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Solvent naphtha<br>(petroleum), light<br>aliph; Low boiling<br>point naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>distillation of crude oil<br>or natural gasoline. It<br>consists predominantly<br>of saturated<br>nydrocarbons having<br>carbon numbers<br>oredominantly in<br>the range of $C_5$<br>through $C_{10}$ and<br>poiling in the range of<br>approximately 35°C<br>to 160°C (95°F to<br>320°F).) | 649-267-00-0 | 265-192-2 | 64742-89-8 |
| Distillates (petroleum),<br>straight-run light;<br>Low boiling point<br>naphtha (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of crude<br>oil. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_2$<br>through $C_7$ and<br>boiling in the range of<br>approximately $-88^{\circ}$ C<br>to $99^{\circ}$ C ( $-127^{\circ}$ F to<br>$210^{\circ}$ F).)          | 649-268-00-6 | 270-077-5 | 68410-05-9 |
| Gasoline, vapor-<br>recovery; Low boiling<br>point naphtha (A<br>complex combination<br>of hydrocarbons<br>separated from the<br>gases from vapor<br>recovery systems by<br>cooling. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in  | 649-269-00-1 | 271-025-4 | 68514-15-8 |

| $\frac{\text{Substances}}{\text{the range of } C_4}$   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| through $C_{11}$ and<br>boiling in the range of<br>approximately $-20^{\circ}$ C<br>to 196°C ( $-4^{\circ}$ F to<br>384°F).)   |              |           |            |
| Gasoline, straight-<br>run, topping-plant;<br>Low boiling point<br>naphtha (A complex<br>combination of<br>hydrocarbons<br>produced from the<br>topping plant by<br>the distillation of<br>crude oil. It boils<br>in the range of<br>approximately 36.1°C<br>to 193.3°C (97°F to<br>380°F).)   | 649-270-00-7 | 271-727-0 | 68606-11-1 |
| Naphtha (petroleum),<br>unsweetened;<br>Low boiling point<br>naphtha (A complex<br>combination of<br>hydrocarbons<br>produced from the<br>distillation of naphtha<br>streams from various<br>refinery processes.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_{12}$ and<br>boiling in the range<br>of approximately 0°C<br>to 230°C (25°F to<br>446°F).) | 649-271-00-2 | 272-186-3 | 68783-12-0 |
| Distillates (petroleum),<br>light straight-run<br>gasoline fractionation<br>stabilizer overheads;<br>Low boiling point<br>naphtha (A complex<br>combination of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the  | 649-272-00-8 | 272-931-2 | 68921-08-4 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| range of $C_3$ through $C_6$ .)  |              |           |             |
| Naphtha (petroleum),<br>heavy straight<br>run, aromcontg.;<br>Low boiling point<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>from a distillation<br>process of crude<br>petroleum. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>in the range of $C_8$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 130°C<br>to 210°C (266°F to<br>410°F).   | 649-273-00-3 | 309-945-6 | 101631-20-3 |
| Naphtha (petroleum)<br>full-range alkylate;<br>Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of the<br>reaction products<br>of isobutane with<br>monoolefinic<br>hydrocarbons usually<br>ranging in carbon<br>numbers from $C_3$<br>through $C_5$ . It consists<br>of predominantly<br>branched chain<br>saturated hydro-<br>carbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 90°C<br>to 220°C (194°F to<br>428°F).) | 649-274-00-9 | 265-066-7 | 64741-64-6  |
| Naphtha (petroleum),<br>heavy alkylate;  | 649-275-00-4 | 265-067-2 | 64741-65-7  |
| neary uniquite,  |              | 144       |             |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of the<br>reaction products<br>of isobutane with<br>monoolefinic<br>hydrocarbons usually<br>ranging in carbon<br>numbers from $C_3$<br>to $C_5$ . It consists<br>of predominantly<br>branched<br>chain saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_9$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 150°C<br>to 220°C (302°F to<br>428°F).)                |              |           |            |
| Naphtha (petroleum),<br>light alkylate;<br>Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of the<br>reaction products<br>of isobutane with<br>monoolefinic<br>hydrocarbons usually<br>ranging in carbon<br>numbers from $C_3$<br>through $C_5$ . It consists<br>of predominantly<br>branched chain<br>saturated hydro-<br>carbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{10}$ and<br>boiling in the range of<br>approximately 90°C | 649-276-00-X | 265-068-8 | 64741-66-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| to 160°C (194°F to 320°F).)  |              |           |            |
| Naphtha (petroleum),<br>isomerization;<br>Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>catalytic isomerization<br>of straight chain<br>paraffinic $C_4$ through<br>$C_6$ hydrocarbons. It<br>consists predominantly<br>of saturated<br>hydrocarbons such as<br>isobutane, isopentane,<br>2,2-dimethylbutane, 2-<br>methylpentane, and 3-<br>methylpentane.)  | 649-277-00-5 | 265-073-5 | 64741-70-4 |
| Naphtha (petroleum),<br>solvent-refined light;<br>Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>raffinate from a<br>solvent extraction<br>process. It consists<br>predominantly<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_{11}$ and<br>boiling in the range of<br>approximately $35^{\circ}$ C<br>to $190^{\circ}$ C ( $95^{\circ}$ F to<br>$374^{\circ}$ F).) | 649-278-00-0 | 265-086-6 | 64741-84-0 |
| Naphtha (petroleum),<br>solvent-refined heavy;<br>Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>raffinate from a<br>solvent extraction  | 649-279-00-6 | 265-095-5 | 64741-92-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| process. It consists<br>predominantly<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 90°C<br>to 230°C (194°F to<br>446°F).)  |              |           |            |
| Raffinates (petroleum),<br>catalytic reformer<br>ethylene glycol-<br>water countercurrent<br>exts.; Low boiling<br>point modified<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>as the raffinate<br>from the UDEX<br>extraction process<br>on the catalytic<br>reformer stream. It<br>consists of saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_6$ through<br>$C_{9}$ .) | 649-280-00-1 | 270-088-5 | 68410-71-9 |
| Raffinates (petroleum),<br>reformer, Lurgi unit-<br>sepd.; Low boiling<br>point modified<br>naphtha (The complex<br>combination of<br>hydrocarbons obtained<br>as a raffinate from<br>a Lurgi separation<br>unit. It consists<br>predominantly of non-<br>aromatic hydrocarbons<br>with various small<br>amounts of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the  | 649-281-00-7 | 270-349-3 | 68425-35-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| range of $C_6$ through $C_8$ ).   |              |           |            |
| Naphtha (petroleum),<br>full-range alkylate,<br>butane-contg.;<br>Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of the<br>reaction products<br>of isobutane with<br>monoolefinic<br>hydrocarbons usually<br>ranging in carbon<br>numbers from C <sub>3</sub><br>through C <sub>5</sub> . It consists<br>of predominantly<br>branched<br>chain saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>7</sub><br>through C <sub>12</sub> with<br>some butanes and<br>boiling in the range of<br>approximately 35°C<br>to 200°C (95°F to<br>428°F).) | 649-282-00-2 | 271-267-0 | 01005 52 8 |
| Distillates (petroleum),<br>naphtha steam<br>cracking-derived,<br>solvent-refined light<br>hydrotreated; Low<br>boiling point modified<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>as the raffinates<br>from a solvent<br>extraction process<br>of hydrotreated light<br>distillate from steam-<br>cracked naphtha.)  | 649-283-00-8 | 295-315-5 | 91995-53-8 |
| Naphtha (petroleum),<br>$C_{4-12}$ butane-alkylate,<br>isooctane-rich; Low<br>boiling point modified  | 649-284-00-3 | 295-430-0 | 92045-49-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by alkylation of<br>butanes. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{12}$ , rich<br>in isooctane, and<br>boiling in the range of<br>approximately 35°C<br>to 210°C (95°F to<br>410°F).)   |              |           |            |
| Hydrocarbons,<br>hydrotreated light<br>naphtha distillates,<br>solvent-refined;<br>Low boiling point<br>modified naphtha<br>(A combination of<br>hydrocarbons obtained<br>from the distillation<br>of hydrotreated<br>naphtha followed by<br>a solvent extraction<br>and distillation<br>process. It consists<br>predominantly of<br>saturated hydrocarbons<br>boiling in the range of<br>approximately 94°C<br>to 99°C (201°F to<br>210°F). | 649-285-00-9 | 295-436-3 | 92045-55-1 |
| Naphtha (petroleum),<br>isomerization, C <sub>6</sub> -<br>fraction; Low boiling<br>point modified<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by distillation of a<br>gasoline which has<br>been catalytically<br>isomerized. It consists<br>predominantly of<br>hexane isomers<br>boiling in the range of  | 649-286-00-4 | 295-440-5 | 92045-58-4 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| approximately 60°C<br>to 66°C (140°F to<br>151°F).)  |              |           | - ··· ·     |
| Hydrocarbons, $C_{6}$<br>7, naphtha-cracking,<br>solvent-refined; Low<br>boiling point modified<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by the sorption of<br>benzene from a<br>catalytically fully<br>hydrogenated benzene-<br>rich hydrocarbon cut<br>that was distillatively<br>obtained from<br>prehydrogenated<br>cracked naphtha. It<br>consists predominantly<br>of paraffinic<br>and naphthenic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>6</sub><br>through C <sub>7</sub> and<br>boiling in the range of<br>approximately 70°C<br>to 100°C (158°F to<br>212°F).) | 649-287-00-X | 295-446-8 | 90245-64-2  |
| Hydrocarbons, C <sub>6</sub> -rich,<br>hydrogenated light<br>naphtha distillates,<br>solvent-refined;<br>Low boiling point<br>modified naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of hydrotreated<br>naphtha followed by<br>solvent extraction. It<br>consists predominantly<br>of saturated<br>hydrocarbons and<br>boiling in the range of<br>approximately 65°C<br>to 70°C (149°F to<br>158°F).)  | 649-288-00-5 | 309-871-4 | 101316-67-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Naphtha (petroleum),<br>heavy catalytic<br>cracked; Low<br>boiling point cat-<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by a<br>distillation of<br>products from a<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_{12}$ and<br>boiling in the range<br>of approximately<br>$65^{\circ}$ C to $230^{\circ}$ C<br>(148°F to 446°F). It<br>contains a relatively<br>large proportion<br>of unsaturated<br>hydrocarbons.)                 | 649-289-00-0 | 265-055-7 | 64741-54-4 |
| Naphtha (petroleum),<br>light catalytic cracked;<br>Low boiling point cat-<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of<br>products from a<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>11</sub> and<br>boiling in the range<br>of approximately<br>$-20^{\circ}$ C to 190°C<br>( $-4^{\circ}$ F to 374°F). It<br>contains a relatively<br>large proportion<br>of unsaturated<br>hydrocarbons.) | 649-290-00-6 | 265-056-2 | 64741-55-5 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Hydrocarbons, $C_{3\_}$<br>11, catalytic cracker<br>distillates; Low<br>boiling point cat-<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillations of<br>products from a<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>3</sub> through<br>C <sub>11</sub> and boiling in a<br>range approximately<br>up to 204°C (400°F).) | 649-291-00-1 | 270-686-6 | 68476-46-0 |
| Naphtha (petroleum),<br>catalytic cracked<br>light dist.; Low<br>boiling point cat-<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of<br>products from a<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_1$ through<br>$C_5$ .)  | 649-292-00-7 | 272-185-8 | 68783-09-5 |
| Distillates (petroleum),<br>naphtha steam<br>cracking-derived,<br>hydrotreated light<br>arom.; Low boiling<br>point cat-cracked<br>naphtha. (A complex<br>combination of<br>hydrocarbons obtained<br>by treating a light<br>distillate from steam-<br>cracked naphtha. It<br>consists predominantly   |              | 295-311-3 | 91995-50-5 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| of aromatic<br>hydrocarbons.)   |              |           |            |
| Naphtha (petroleum),<br>heavy catalytic<br>cracked, sweetened;<br>Low boiling point cat-<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>a catalytic cracked<br>petroleum distillate to<br>a sweetening process<br>to convert mercaptans<br>or to remove acidic<br>impurities. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately $60^{\circ}C$<br>to $200^{\circ}C$ ( $140^{\circ}F$ to<br>$392^{\circ}F$ ).) | 649-294-00-8 | 295-431-6 | 92045-50-6 |
| Naphtha (petroleum),<br>light catalytic cracked<br>sweetened; Low<br>boiling point cat-<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained by<br>subjecting naphtha<br>from a catalytic<br>cracking process to a<br>sweetening process to<br>convert mercaptans<br>or to remove acidic<br>impurities. It consists<br>predominantly<br>of hydrocarbons<br>boiling in a range of<br>approximately 35°C<br>to 210°C (95°F to<br>410°F).)  | 649-295-00-3 | 295-441-0 | 92045-59-5 |
| Hydrocarbons, C <sub>8</sub> _ <sub>12</sub> , catalytic-cracking, chem. neutralized;   | 649-296-00-9 | 295-794-0 | 92128-94-4 |

| Substances                                  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| Low boiling point cat-                      | Index number | EC number | CAS number  |
| cracked naphtha (A                          |              |           |             |
| complex combination                         |              |           |             |
| of hydrocarbons                             |              |           |             |
| produced by the                             |              |           |             |
| distillation of a cut                       |              |           |             |
| from the catalytic                          |              |           |             |
| cracking process,                           |              |           |             |
| having undergone an                         |              |           |             |
| alkaline washing. It                        |              |           |             |
| consists predominantly                      |              |           |             |
| of hydrocarbons                             |              |           |             |
| having carbon                               |              |           |             |
| numbers in the range                        |              |           |             |
| of $C_8$ through $C_{12}$ and               |              |           |             |
| boiling in the range of approximately 130°C |              |           |             |
| to 210°C (266°F to                          |              |           |             |
| 410°F).)                                    |              |           |             |
| , ,   |              |           |             |
| Hydrocarbons, C <sub>8</sub>                | 649-297-00-4 | 309-974-4 | 101794-97-2 |
| 12, catalytic cracker                       |              |           |             |
| distillates; Low                            |              |           |             |
| boiling point cat-                          |              |           |             |
| cracked naphtha (A                          |              |           |             |
| complex combination of hydrocarbons         |              |           |             |
| obtained by distillation                    |              |           |             |
| of products from a                          |              |           |             |
| catalytic cracking                          |              |           |             |
| process. It consists                        |              |           |             |
| predominantly of                            |              |           |             |
| hydrocarbons having                         |              |           |             |
| carbon numbers                              |              |           |             |
| predominantly in                            |              |           |             |
| the range of C <sub>8</sub>                 |              |           |             |
| through $C_{12}$ and                        |              |           |             |
| boiling in the range of                     |              |           |             |
| approximately 140°C                         |              |           |             |
| to 210°C (284°F to $(284°F)$ )              |              |           |             |
| 410°F).)                                    |              |           |             |
| Hydrocarbons, C <sub>8</sub>                | 649-298-00-X | 309-987-5 | 101896-28-0 |
| 12, catalytic cracking,                     |              |           |             |
| chem. neutralized,                          |              |           |             |
| sweetened; Low                              |              |           |             |
| boiling point cat-                          |              |           |             |
| cracked naphtha                             |              |           |             |
| Naphtha (petroleum),                        | 649-299-00-5 | 265-065-1 | 64741-63-5  |
| light catalytic                             |              |           |             |
| reformed; Low                               |              |           |             |
| boiling point cat-                          |              |           |             |
|   | 1            | 54        |             |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| reformed naphtha (A<br>complex combination<br>of hydrocarbons<br>produced from<br>the distillation of<br>products from a<br>catalytic reforming<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_{11}$ and<br>boiling in the range of<br>approximately 35°C to<br>190°C (95°F to 374°F.<br>It contains a relatively<br>large proportion of<br>aromatic and branched<br>chain hydrocarbons.<br>This stream may<br>contain 10 vol. % or<br>more benzene.) |              |           |            |
| Naphtha (petroleum),<br>heavy catalytic<br>reformed; Low<br>boiling point cat-<br>reformed naphtha (A<br>complex combination<br>of hydrocarbons<br>produced from<br>the distillation of<br>products from a<br>catalytic reforming<br>process. It consists<br>of predominantly<br>aromatic hydrocarbons<br>having numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 90°C<br>to 230°C (194°F to<br>446°F).)  | 649-300-00-9 | 265-070-9 | 64741-68-0 |
| Distillates (petroleum),<br>catalytic reformed<br>depentanizer; Low<br>boiling point cat-<br>reformed naphtha (A   | 649-301-00-4 | 270-660-4 | 68475-79-6 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| complex combination<br>of hydrocarbons<br>from the distillation<br>of products from a<br>catalytic reforming<br>process. It consists<br>predominantly<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_3$<br>through $C_6$ and<br>boiling in the range of<br>approximately -49°C<br>to 63°C (-57°F to<br>145°F).)<br>Hydrocarbons, $C_2$ _6, | 649-302-00-X | 270-687-1 | 68476-47-1 |
| Hydrocarbons, $C_{2}$ —6,<br>$C_{6}$ —8 catalytic<br>reformer; Low boiling<br>point cat-reformed<br>naphtha   | 649-302-00-X | 270-687-1 | 68476-47-1 |
| Residues (petroleum),<br>$C_{68}$ catalytic<br>reformer; Low<br>boiling point cat-<br>reformed naphtha (A<br>complex residuum<br>from the catalytic<br>reforming of $C_{68}$<br>feed. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>2</sub> through<br>$C_{6-}$ )  | 649-303-00-5 | 270-794-3 | 68478-15-9 |
| Naptha (petroleum),<br>light catalytic<br>reformed, arom<br>free; low boiling<br>point cat-reformed<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>from distillation<br>of products from a<br>catalytic reforming<br>process. It consists<br>predominantly of<br>hydrocarbons having   | 649-304-00-0 | 270-993-5 | 68513-03-1 |
|   | 1            | 156       |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_8$ and<br>boiling in the range of<br>approximately 35°C<br>to 120°C (95°F to<br>248°F). It contains<br>a relatively large<br>proportion of branched<br>chain hydro-carbons<br>with the aromatic<br>components removed.)   |              |           |            |
| Distillates (petroleum),<br>catalytic reformed<br>straight-run naphtha<br>overheads; Low<br>boiling point cat-<br>reformed naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>catalytic reforming of<br>straight-run naphtha<br>followed by the<br>fractionation of<br>the total effluent.<br>It consists of<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_6$ .) | 649-305-00-6 | 271-008-1 | 68513-63-3 |
| Petroleum products,<br>nydrofiner-<br>oowerformer<br>reformates; Low<br>poiling point cat-<br>reformed naphtha<br>The complex<br>combination of<br>nydrocarbons obtained<br>n a hydro finer-<br>powerformer process<br>and boiling in a range<br>of approximately 27°C<br>o 210°C (80°F to<br>410°F).)   | 649-306-00-1 | 271-058-4 | 68514-79-4 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Naphtha (petroleum,<br>full-range reformed;<br>Low boiling point cat-<br>reformed naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of the<br>products from a<br>catalytic reforming<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 35°C<br>to 230°C (95°F to<br>446°F).)   | 649-307-00-7 | 272-895-8 | 68919-37-9 |
| Naphtha (petroleum),<br>catalytic reformed;<br>Low boiling point cat-<br>reformed naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of<br>products from a<br>catalytic reforming<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>12</sub> and<br>boiling in the range of<br>approximately 30°C<br>to 220°C (90°F to<br>430°F).) It contains<br>a relatively large<br>proportion of aromatic<br>and branched chain<br>hydro-carbons. This<br>stream may contain<br>10 vol.% or more<br>benzene.) | 649-308-00-2 | 273-271-8 | 68955-35-1 |
| Distillates (petroleum),<br>catalytic reformed<br>hydrotreated light, C <sub>8</sub>   | 049-309-00-8 | 285-509-8 | 85116-58-1 |
|  | -            | 50        |            |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| ${12}$ arom. fraction;<br>Low boiling point cat-<br>reformed naphtha (A<br>complex combination<br>of alkylbenzenes<br>obtained by the<br>catalytic reforming<br>of petroleum<br>naphtha. It consists<br>predominantly of<br>alkylbenzenes having<br>carbon numbers<br>predominantly in<br>the range of C <sub>8</sub><br>through C <sub>10</sub> and<br>boiling in the range of<br>approximately 160°C<br>to 180°C (320°F to<br>356°F).)  |              |           |            |
| Aromatic<br>hydrocarbons, C <sub>8</sub> ,<br>catalytic reforming-<br>derived; Low boiling<br>point cat-reformed<br>naphtha.  | 649-310-00-3 | 295-279-0 | 91995-18-5 |
| Aromatic<br>hydrocarbons, $C_7$<br>$_{-12}$ , $C_8$ -rich; Low<br>boiling point cat-<br>reformed naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained by separation<br>from the platformate-<br>containing fraction. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly<br>in the range of<br>$C_7$ through $C_{12}$<br>(primarily $C_8$ ) and can<br>contain non aromatic<br>hydrocarbons, both<br>boiling in the range of<br>approximately 130°C<br>to 200°C (266°F to<br>392°F).) | 649-311-00-9 | 297-401-8 | 93571-75-6 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Gasoline, $C_{5-11}$ ,<br>high-octane stabilized<br>reformed; Low<br>boiling point cat-<br>reformed naphtha<br>(A complex high<br>octane combination of<br>hydrocarbons obtained<br>by the catalytic<br>dehydrogenation<br>of a predominantly<br>naphthenic naphtha. It<br>consists predominantly<br>of aromatics and non-<br>aromatics having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_{11}$ and<br>boiling in the range of<br>approximately $45^{\circ}$ C<br>to $185^{\circ}$ C ( $113^{\circ}$ F to<br>$365^{\circ}$ F).) | 649-312-00-4 | 297-458-9 | 93572-29-3 |
| Hydrocarbons, $C_7$<br>  | 649-313-00-X | 297-465-7 | 93572-35-1 |
| Hydrocarbons, C <sub>5</sub><br>-11, nonaroms  | 649-314-00-5 | 297-466-2 | 93572-36-2 |
| rich, reforming light  |              | 160       |            |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| fraction; Low boiling<br>point cat-reformed<br>haphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by separation from<br>the platformate-<br>containing fraction. It<br>consists predominantly<br>of non aromatic<br>hydrocarbons having<br>carbon numbers<br>oredominantly in the<br>ange of $C_5$ to $C_{11}$ and<br>poiling in the range of<br>hyproximately 35°C<br>to 125°C (94°F to<br>257°F), benzene and<br>oluene.) |              |           |            |
| Foots oil (petroleum),<br>silicic acid-treated;<br>Foots oil (A complex<br>combination of<br>hydrocarbons obtained<br>by the treatment of<br>Foots oil with silicic<br>acid for removal of<br>trace constituents<br>and impurities. It<br>consists predominantly<br>of straight chain<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{12}$ .)   | 649-315-00-0 | 308-127-6 | 97862-77-6 |
| Naphtha (petroleum),<br>light thermal cracked;<br>Low boiling point<br>thermally cracked<br>naphtha (A complex<br>combination of<br>hydrocarbons from<br>distillation of products<br>from a thermal<br>cracking process. It<br>consists predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in  | 649-316-00-6 | 265-075-6 | 64741-74-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| the range of $C_4$<br>through $C_8$ and<br>boiling in the range of<br>approximately $-10^{\circ}$ C<br>to 130°C (14°F to<br>226°F).)   |              |           |            |
| Naphtha (petroleum),<br>heavy thermal<br>cracked; Low boiling<br>point thermally<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons from<br>distillation of products<br>from a thermal<br>cracking process. It<br>consists predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately $65^{\circ}$ C<br>to $220^{\circ}$ C ( $148^{\circ}$ F to<br>$428^{\circ}$ F).) | 649-317-00-1 | 265-085-0 | 64741-83-9 |
| Distillates (petroleum),<br>heavy arom.; Low<br>boiling point thermally<br>cracked naphtha (The<br>complex combination<br>of hydrocarbons from<br>the distillation of<br>products from the<br>thermal cracking of<br>ethane and propane.<br>This higher boiling<br>fraction consists<br>predominantly of<br>$C_5$ - $C_7$ aromatic<br>hydrocarbons with<br>some unsaturated<br>aliphatic hydrocarbons<br>having a carbon<br>number predominantly<br>of $C_5$ . This stream may<br>contain benzene.)            | 649-318-00-7 | 267-563-4 | 67891-79-6 |
| Distillates (petroleum),<br>light arom.; Low   | 649-319-00-2 | 267-565-5 | 67891-80-9 |
|  |              | 162       |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| boiling point thermally<br>cracked naphtha (The<br>complex combination<br>of hydrocarbons from<br>the distillation of<br>products from the<br>thermal cracking of<br>ethane and propane.<br>This lower boiling<br>fraction consists<br>predominantly of<br>$C_5$ - $C_7$ aromatic<br>hydrocarbons with<br>some unsaturated<br>aliphatic hydrocarbons<br>having a carbon<br>number predominantly<br>of $C_5$ . This stream may<br>contain benzene.) |              |           |            |
| Distillates (petroleum),<br>naphtha-raffinate<br>pyrolyzate-derived,<br>gasoline-blending;<br>Low boiling point<br>thermally cracked<br>naphtha (The complex<br>combination of<br>hydrocarbons obtained<br>by the pyrolysis<br>fractionation at<br>816°C (1500°F)<br>of naphtha and<br>raffinate. It consists<br>predominantly of<br>hydrocarbons having<br>a carbon number of<br>C9 and boiling at<br>approximately 204°C<br>(400°F.)             | 649-320-00-8 | 270-344-6 | 68425-29-6 |
| Aromatic<br>hydrocarbons, C <sub>6</sub><br><sub>8</sub> 8, naphtha-raffinate<br>pyrolyzate-derived;<br>Low boiling point<br>thermally cracked<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by the fractionation<br>pyrolysis at 816°C  | 649-321-00-3 | 270-658-3 | 68475-70-7 |

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| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| (1500°F) of naphtha<br>and raffinate. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_8$ , including<br>benzene.)   |              |           |            |
| Distillates (petroleum),<br>thermal cracked<br>naphtha and gas<br>oil; Low boiling<br>point thermally<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of<br>thermally cracked<br>naphtha and/or<br>gas oil. It consists<br>predominantly of<br>olefinic hydrocarbons<br>having a carbon<br>number of $C_5$ and<br>boiling in the range of<br>approximately 33°C to<br>60°C (91°F to 140°F).)                                  | 649-322-00-9 | 271-631-9 | 68603-00-9 |
| Distillates (petroleum),<br>thermal cracked<br>naphtha and gas oil,<br>$C_5$ -dimer-contg.; Low<br>boiling point thermally<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>extractive distillation<br>of thermal cracked<br>naphtha and/or<br>gas oil. It consists<br>predominantly of<br>hydrocarbons having<br>a carbon number of $C_5$<br>with some dimerized<br>$C_5$ olefins and boiling<br>in the range of<br>approximately 33°C | 649-323-00-4 | 271-632-4 | 68603-01-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| to 184°C (91°F to 363°F).)   |              |           |            |
| Distillates (petroleum),<br>thermal cracked<br>naphtha and gas<br>oil, extractive; Low<br>boiling point thermally<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>extractive distillation<br>of thermal cracked<br>naphtha and/or<br>gas oil. It consists<br>of paraffinic and<br>olefinic hydrocarbons<br>predominantly<br>isoamylenes such as 2-<br>methyl-1-butene and<br>2-methyl-2-butene and<br>boiling in the range of<br>approximately 31°C to<br>40°C (88°F to 104°F).) |              | 271-634-5 | 68603-03-2 |
| Distillates (petroleum),<br>light thermal cracked,<br>debutanized arom.;<br>Low boiling point<br>thermally cracked<br>naphtha (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of products<br>from a thermal<br>cracking process. It<br>consists predominantly<br>of aromatic<br>hydrocarbons,<br>primarily benzene.)   | 649-325-00-5 | 273-266-0 | 68955-29-3 |
| Naphtha (petroleum),<br>light thermal cracked,<br>sweetened; Low<br>boiling point thermally<br>cracked naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>a petroleum distillate<br>from the high   | 649-326-00-0 | 295-447-3 | 92045-65-3 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| temperature thermal<br>cracking of heavy<br>oils fractions<br>to a sweetening<br>process to convert<br>mercaptans. It consists<br>predominantly of<br>aromatics, olefins and<br>saturated hydrocarbons<br>boiling in the range of<br>approximately 20°C<br>to 100°C (68°F to<br>212°F).)  |              |           |            |
| Naphtha (petroleum),<br>hydrotreated heavy;<br>Low boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by treating a petroleum<br>fraction with hydrogen<br>in the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_{13}$ and<br>boiling in the range of<br>approximately $65^{\circ}$ C<br>to $230^{\circ}$ C ( $149^{\circ}$ F to<br>$446^{\circ}$ F).) | 649-327-00-6 | 265-150-3 | 64742-48-9 |
| Naphtha (petroleum),<br>hydrotreated light;<br>Low boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by treating a petroleum<br>fraction with hydrogen<br>in the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>4</sub> through<br>C <sub>11</sub> and boiling in<br>the range of $-20^{\circ}$ C  | 649-328-00-1 | 265-151-9 | 64742-49-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| to 190°C (-4°F to 374°F).)   |              |           |            |
| Naphtha (petroleum),<br>hydrodesulphurized<br>light; Low boiling<br>point hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>from a catalytic<br>hydrodesulphurization<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{11}$ and<br>boiling in the range of<br>approximately $-20^{\circ}$ C<br>to 190°C ( $-4^{\circ}$ F to<br>374°F).) | 649-329-00-7 | 265-178-6 | 64742-73-0 |
| Naphtha (petroleum),<br>hydrodesulphurized<br>heavy; Low boiling<br>point hydrogentreated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>from a catalytic<br>hydrodesulphurization<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 90°C<br>to 230°C (194°F to<br>446°F).)                       | 649-330-00-2 | 265-185-4 | 64742-82-1 |
| Distillates (petroleum),<br>hydrotreated middle,<br>intermediate boiling;<br>Low boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by the distillation<br>of products from   | 649-331-00-8 | 270-092-7 | 68410-96-8 |

**Substances Index number EC number CAS** number a middle distillate hydrotreating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>5</sub> through C10 and boiling in the range of approximately 127°C to 188°C (262°F to 370°F).) Distillates (petroleum), 649-332-00-3 270-093-2 68410-97-9 light distillate hydrotreating process, low-boiling; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by the distillation of products from the light distillate hydrotreating process. It consists of hydrocarbons having carbon numbers predominantly in the range of C<sub>6</sub> through C9 and boiling in the range of approximately 3°C to 194°C (37°F to 382°F).) Distillates (petroleum), 649-333-00-9 270-094-8 68410-98-0 hydrotreated heavy naphtha, deisohexanizer overheads; Low boiling point hydrogen treated naphtha (A complex combination of hydrocarbons obtained by the distillation of the products from a heavy naphtha hydrotreating process. It consists of hydrocarbons having carbon numbers

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| predominantly in<br>the range of $C_3$<br>through $C_6$ and<br>boiling in the range of<br>approximately $-49^{\circ}C$<br>to $68^{\circ}C$ ( $-57^{\circ}F$ to<br>$155^{\circ}F$ ).)   | Index number | EC number | CAS number |
| Solvent naphtha<br>(petroleum), light<br>arom., hydrotreated;<br>Low boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by treating a petroleum<br>fraction with hydrogen<br>in the presence of a<br>catalyst. It consists<br>predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_8$<br>through $C_{10}$ and<br>boiling in the range of<br>approximately 135°C<br>to 210°C (275°F to<br>410°F).) | 649-334-00-4 | 270-988-8 | 68512-78-7 |
| Naphtha (petroleum),<br>hydrodesulphurized<br>thermal cracked light;<br>Low boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>by fractionation of<br>hydrodesulphurized<br>thermal cracker<br>distillate. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_5$ to $C_{11}$ and<br>boiling in the range of<br>approximately 23°C  | 649-335-00-X | 285-511-9 | 85116-60-5 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| to 195°C (73°F to 383°F).)   |              |           |            |
| Naphtha (petroleum),<br>hydrotreated light,<br>cycloalkane-contg.;<br>Low boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>from the distillation of<br>a petroleum fraction. It<br>consists predominantly<br>of alkanes and<br>cycloalkanes boiling<br>in the range of<br>approximately -20°C<br>to 190°C (-4°F to<br>374°F).)  | 649-336-00-5 | 285-512-4 | 85116-61-6 |
| Naphtha (petroleum),<br>heavy steam-cracked,<br>hydrogenated; Low<br>boiling point hydrogen<br>treated naphtha   | 649-337-00-0 | 295-432-1 | 92045-51-7 |
| Naphtha (petroleum)<br>hydrodesulphurized<br>full-range; Low<br>boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>from a catalytic<br>hydrodesulphurization<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>11</sub> and<br>boiling in the range of<br>approximately 30°C<br>to 250°C (86°F to<br>482°F).) | 649-338-00-6 | 295-433-7 | 92045-52-8 |
| Naphtha (petroleum),<br>hydrotreated light<br>steam-cracked; Low<br>boiling point hydrogen<br>treated naphtha (A   | 649-339-00-1 | 295-438-4 | 92045-57-3 |
|  |              | 170       |            |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction,<br>derived from a<br>pyrolysis process,<br>with hydrogen in<br>the presence of a<br>catalyst. It consists<br>predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_{11}$ and<br>boiling in the range of<br>approximately $35^{\circ}$ C<br>to $190^{\circ}$ C ( $95^{\circ}$ F to<br>$374^{\circ}$ F).)  |              |           |            |
| Hydrocarbons, $C_{4-}$<br>hydrotreated; Low<br>boiling point hydrogen<br>treated naphtha(A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>from the product<br>of naphtha steam<br>cracking process<br>and subsequent<br>catalytic selective<br>hydrogenation of gum<br>formers. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 30°C<br>to 230°C (86°F to<br>446°F).) | 649-340-00-7 | 295-443-1 | 92045-61-9 |
| Solvent naphtha<br>(petroleum),<br>nydrotreated light<br>naphthenic; Low<br>poiling point hydrogen<br>reated naphtha (A   | 649-341-00-2 | 295-529-9 | 92062-15-2 |

Index number **EC number** CAS number complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in

| the presence of a          |
|----------------------------|
| catalyst. It consists      |
| predominantly of           |
| cycloparaffinic            |
| hydrocarbons having        |
| carbon numbers             |
| predominantly in           |
| the range of $C_6$         |
| through C <sub>7</sub> and |
| boiling in the range of    |
| approximately 73°C         |
| to 85°C (163°F to          |
|                            |

Substances

| 185°F).)  |              |           |            |
|---|--------------|-----------|------------|
| Naphtha (petroleum),<br>light steam-cracked,<br>hydrogenated; Low<br>boiling point hydrogen<br>treated naphtha (A<br>complex combination<br>of hydrocarbons<br>produced from<br>the separation<br>and subsequent<br>hydrogenation of the<br>products of a steam-<br>cracking process to<br>produce ethylene. It<br>consists predominantly<br>of saturated and<br>unsaturated paraffins,<br>cyclic paraffins<br>and cyclic aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>10</sub> and<br>boiling in the range<br>of approximately<br>$50^{\circ}$ C to $200^{\circ}$ C<br>( $122^{\circ}$ F to $392^{\circ}$ F). The<br>proportion of benzene<br>hydrocarbons may | 649-342-00-8 | 296-942-7 | 93165-55-0 |
| vary up to 30 wt. %   |              |           |            |
| and the stream may  |              |           |            |
| also contain small  |              |           |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| amounts of sulphur<br>and oxygenated<br>compounds.)  |              | 20        |            |
| Hydrocarbons, $C_6$<br>—11ydrotreated,<br>dearomatized; Low<br>boiling point hydrogen<br>treated naphtha (A<br>complex combination<br>of hydrocarbons<br>obtained as solvents<br>which have been<br>subjected to hydro<br>treatment in order<br>to convert aromatics<br>to naphthenes<br>by catalytic<br>hydrogenation.)               | 649-343-00-3 | 297-852-0 | 93763-33-8 |
| Hydrocarbons, C <sub>9</sub><br>_12, hydrotreated,<br>dearomatized,<br>Low boiling point<br>hydrogen treated<br>naphtha (A complex<br>combination of<br>hydrocarbons obtained<br>as solvents which<br>have been subjected<br>to hydrotreatment<br>in order to convert<br>aromatics to<br>naphthenes<br>by catalytic<br>hydrogenation.) | 649-344-00-9 | 297-853-6 | 93763-34-9 |
| Stoddard solvent;<br>Low boiling point<br>naphtha—unspecified<br>(A colourless, refined<br>petroleum distillate<br>that is free from rancid<br>or objectionable<br>odours and that<br>boils in a range of<br>approximately 300°F<br>to 400°F.)   | 649-345-00-4 | 232-489-3 | 8052-41-3  |
| Natural gas<br>condensates<br>(petroleum); Low<br>boiling point naphtha  | 649-346-00-X | 265-047-3 | 64741-47-5 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| —unspecified (A<br>complex combination<br>of hydrocarbons<br>separated as a<br>liquid from natural<br>gas in a surface<br>separator by retrograde<br>condensation. It<br>consists mainly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ to $C_{20}$ . It is<br>a liquid at atmospheric<br>temperature and<br>pressure.)   |              |           |            |
| Natural gas<br>(petroleum), raw liq.<br>mix; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>separated as a liquid<br>from natural gas<br>in a gas recycling<br>plant by processes<br>such as refrigeration<br>or absorption. It<br>consists mainly of<br>saturated aliphatic<br>hydrocarbons having<br>carbon numbers in the<br>range of $C_2$ through<br>$C_{8.}$ ) | 649-347-00-5 | 265-048-9 | 64741-48-6 |
| Naphtha (petroleum),<br>light hydrocracked;<br>Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>from distillation of<br>the products from<br>a hydrocracking<br>process. It consists<br>predominantly<br>of saturated<br>hydrocarbons having<br>carbon numbers   | 649-348-00-0 | 265-071-4 | 64741-69-1 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| predominantly in<br>the range of $C_4$<br>through $C_{10}$ and<br>boiling in the range of<br>approximately $-20^{\circ}C$<br>to $180^{\circ}C$ ( $-4^{\circ}F$ to<br>$356^{\circ}F$ ).)  |              |           |            |
| Naphtha (petroleum)<br>heavy hydrocracked;<br>Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>from distillation of<br>the products from<br>a hydrocracking<br>process. It consists<br>predominantly<br>of saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>6</sub><br>through C <sub>12</sub> , and<br>boiling in the range of<br>approximately $65^{\circ}$ C<br>to 230°C (148°F to<br>446°F).) | 649-349-00-6 | 265-079-8 | 64741-78-2 |
| Naphtha (petroleum),<br>sweetened; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>a petroleum naphtha to<br>a sweetening process<br>to convert mercaptans<br>or to remove<br>acidic impurities.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately $-10^{\circ}C$                            | 649-350-00-1 | 265-089-2 | 64741-87-3 |

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| Substances<br>to 230°C (14°F to  | Index number | EC number | CAS number |
| 446°F).)   |              |           |            |
| Naphtha (petroleum),<br>acid-treated; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as a<br>raffinate from a<br>sulphuric acid treating<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 90°C<br>to 230°C (194°F to<br>446°F).)   | 649-351-00-7 | 265-115-2 | 64742-15-0 |
| Naphtha (petroleum),<br>chemically neutralized<br>heavy; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by a<br>treating process<br>to remove acidic<br>materials. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>6</sub><br>through C <sub>12</sub> and<br>boiling in the range of<br>approximately $65^{\circ}$ C<br>to 230°C (149°F to<br>446°F).) | 649-352-00-2 | 265-122-0 | 64742-22-9 |
| Naphtha (petroleum)<br>chemically neutralized<br>light; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by a<br>treating process   | 649-353-00-8 | 265-123-6 | 64742-23-0 |
|  |              | 176       |            |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| to remove acidic<br>materials. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{11}$ and<br>boiling in the range of<br>approximately $-20^{\circ}$ C<br>to 190°C ( $-4^{\circ}$ F to<br>374°F).)  |              |           |            |
| Naphtha (petroleum),<br>catalytic dewaxed;<br>Low boiling point<br>naphtha unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>from the catalytic de<br>waxing of a petroleum<br>fraction. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 35°C<br>to 230°C (95°F to<br>446°F).) | 649-354-00-3 | 265-170-2 | 64742-66-1 |
| Naphtha (petroleum),<br>light steam-cracked;<br>Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>distillation of the<br>products from a steam<br>cracking process. It<br>consists predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{11}$ and<br>boiling in the range of                      | 649-355-00-9 | 265-187-5 | 64742-83-2 |

| Substances  | Inday number | EC number        | CAS number |
|---|--------------|------------------|------------|
| Substances<br>approximately -20°C<br>to 190°C (-4°F to<br>374°F). This stream<br>is likely to contain<br>10 vol. % or more<br>benzene.)   | Index number | <u>EC number</u> | CAS number |
| Solvent naphtha<br>(petroleum), light<br>arom.; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>distillation of aromatic<br>streams. It consists<br>predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_8$<br>through $C_{10}$ and<br>boiling in the range of<br>approximately 135°C<br>to 210°C (275°F to<br>410°F).) | 649-356-00-4 | 265-199-0        | 64742-95-6 |
| Aromatic<br>hydrocarbons, $C_6$<br>$\{10}$ , acid-treated,<br>neutralized; Low<br>boiling point naphtha<br>unspecified  | 649-357-00-X | 268-618-5        | 68131-49-7 |
| Distillates (petroleum),<br>$C_{3-5}$ , 2-methyl-2-<br>butene-rich; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>from the distillation<br>of hydrocarbons<br>usually ranging in<br>carbon numbers<br>from C <sub>3</sub> through<br>C <sub>5</sub> , predominantly<br>isopentane and 3-<br>methyl-1-butene. It<br>consists of saturated<br>and unsaturated                                    | 649-358-00-5 | 270-725-7        | 68477-34-9 |

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|---|--------------|-----------|------------|
| Substances<br>hydrocarbons having   | Index number | EC number | CAS number |
| carbon numbers in the<br>range of C <sub>3</sub> through<br>C <sub>5</sub> , predominantly 2-<br>methyl-2-butene.)  |              |           |            |
| Distillates (petroleum),<br>polymd. steam-<br>cracked petroleum<br>distillates, $C_{5-}$<br>$_{12}$ fraction; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>the distillation of<br>polymerized steam-<br>cracked petroleum<br>distillate. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>5</sub> through<br>C <sub>12</sub> .) | 649-359-00-0 | 270-735-1 | 68477-50-9 |
| Distillates (petroleum),<br>steam-cracked, $C_5$<br>$\{12}$ fraction; Low<br>boiling point naphtha<br>$\_$ unspecified (A<br>complex combination<br>of organic compounds<br>obtained by the<br>distillation of products<br>from a steam cracking<br>process. It consists<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_5$ through<br>$C_{12}$ .)  | 649-360-00-6 | 270-736-7 | 68477-53-2 |
| Distillates (petroleum),<br>steam-cracked, $C_{5-10}$<br>fraction, mixed with<br>light steam-cracked<br>petroleum naphtha<br>$C_5$ fraction; Low  | 649-361-00-1 | 270-738-8 | 68477-55-4 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| boiling point naphtha<br>—unspecified  |              |           |             |
| Extracts (petroleum),<br>cold-acid, $C_{4-6}$ Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of organic compounds<br>produced by cold<br>acid unit extraction<br>of saturated and<br>unsaturated aliphatic<br>hydrocarbons<br>usually ranging in<br>carbon numbers<br>from C <sub>3</sub> through<br>C <sub>6</sub> , predominantly<br>pentanes and<br>amylenes. It consists<br>predominantly<br>of saturated<br>and unsaturated<br>hydrocarbons having<br>carbon numbers in the<br>range of C <sub>4</sub> through<br>C <sub>6</sub> , predominantly C <sub>5</sub> .) | 649-362-00-7 | 270-741-4 | 68477-61-2  |
| Distillates (petroleum),<br>depentanizer<br>overheads; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>catalytic cracked<br>gas stream. It<br>consists of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_4$ through<br>$C_{6}$ .)   | 649-363-00-2 | 270-771-8 | 68477-894-4 |
| Residues (petroleum),<br>butane splitter<br>bottoms; Low boiling<br>point naphtha—<br>unspecified (A<br>complex residuum<br>from the distillation<br>of butane stream. It  | 649-364-00-8 | 270-791-7 | 68478-12-6  |

| Substancesconsists of aliphatichydrocarbons havingcarbon numberspredominantly in therange of $C_4$ through $C_{6.}$ )  | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Residual oils<br>(petroleum),<br>deisobutanizer tower;<br>Low boiling point<br>naphtha—unspecified<br>(A complex residuum<br>from the atmospheric<br>distillation of the<br>butane-butylene<br>stream. It consists<br>of aliphatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_4$ through<br>$C_{6}$ .)  | 649-365-00-3 | 270-795-9 | 68478-16-0 |
| Naphtha (petroleum),<br>full-range coker; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of products<br>from a fluid coker. It<br>consists predominantly<br>of unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>15</sub> and<br>boiling in the range of<br>approximately 43°C<br>to 250°C (110°F to<br>500°F).) | 649-366-00-9 | 270-991-4 | 68513-02-0 |
| Naphtha (petroleum),<br>steam-cracked middle<br>arom.; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by the  | 649-367-00-4 | 271-138-9 | 68516-20-1 |

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| Substances   | Index number | EC number | CAS number |
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| distillation of products<br>from a steam-cracking<br>process. It consists<br>predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 130°C<br>to 220°C (226°F to<br>428°F).)   |              |           |            |
| Naphtha (petroleum),<br>clay-treated full-range<br>straight-run; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>resulting from<br>treatment of full-<br>range straight-run,<br>naphtha with natural or<br>modified clay, usually<br>in a percolation<br>process to remove<br>the trace amounts<br>of polar compounds<br>and impurities<br>present. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>11</sub> and<br>boiling in the range of<br>approximately $-20^{\circ}$ C<br>to 220°C ( $-4^{\circ}$ F to<br>429°F).) |              | 271-262-3 | 68527-21-9 |
| Naphtha (petroleum),<br>clay-treated light<br>straight-run; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>resulting from<br>treatment of light  | 649-369-00-5 | 271-263-9 | 68527-22-0 |

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| Substances  | Index number | EC number | CAS number |
| straight-run naphtha<br>with a natural or<br>modified clay, usually<br>in a percolation<br>process to remove<br>the trace amounts of<br>polar compounds and<br>impurities, present.<br>It consists of hydro-<br>carbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{10}$ and<br>boiling in the range of<br>approximately 93°C<br>to 180°C (200°F to<br>356°F).)   |              |           |            |
| Naphtha (petroleum),<br>light steam-cracked<br>arom.; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of products<br>from a steam-cracking<br>process. It consists<br>predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_9$ , and<br>boiling in the range of<br>approximately 110°C<br>to 165°C (230°F to<br>329°F).) | 649-370-00-0 | 271-264-4 | 68527-23-1 |
| Naphtha (petroleum),<br>light steam-cracked,<br>debenzenized; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of products<br>from a steam-cracking   | 649-371-00-6 | 271-266-5 | 68527-26-4 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 80°C<br>to 218°C (176°F to<br>424°F).)   |              |           |            |
| Naphtha (petroleum),<br>aromcontg.; Low<br>boiling point naphtha<br>—unspecified   | 649-372-00-1 | 271-635-0 | 68603-08-7 |
| Gasoline, pyrolysis,<br>debutanizer bottoms;<br>low boiling point<br>naphtha—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>from the fractionation<br>of depropanizer<br>bottoms. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{5.}$ )   | 649-373-00-7 | 271-726-5 | 68606-10-0 |
| Naphtha (petroleum),<br>light, sweetened; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>a petroleum distillate<br>to a sweetening<br>process to convert<br>mercaptans or<br>to remove acidic<br>impurities. It consists<br>predominantly<br>of saturated<br>and unsaturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_3$<br>through $C_6$ and | 649-374-00-2 | 272-206-0 | 68783-66-4 |
|  |              | 184       |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| boiling in the range of<br>approximately -20°C<br>to 100°C (-4°F to<br>212°F).)  |              |           |            |
| Natural gas<br>condensates; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>separated and/or<br>condensed from<br>natural gas during<br>transportation<br>and collected<br>at the wellhead<br>and/or from the<br>production, gathering,<br>transmission, and<br>distribution pipelines<br>in deeps, scrubbers,<br>etc. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{8}$ .) | 649-375-00-8 | 272-896-3 | 68919-39-1 |
| Distillates (petroleum),<br>naphtha unifiner<br>stripper; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by stripping<br>the products from<br>the naphtha unifiner.<br>It consists of<br>saturated aliphatic<br>nydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_2$ through<br>$C_{6.}$ )   | 649-376-00-3 | 272-932-8 | 68921-09-5 |
| Naphtha (petroleum),<br>catalytic reformed<br>light, arom-free<br>fraction; Low boiling<br>point naphtha—  | 649-377-00-9 | 285-510-3 | 85116-59-2 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| unspecified (A<br>complex combination<br>of hydrocarbons<br>remaining after<br>removal of aromatic<br>compounds from<br>catalytic reformed<br>light naphtha in a<br>selective absorption<br>process. It consists<br>predominantly of<br>paraffinic and cyclic<br>compounds having<br>carbon numbers<br>predominantly in the<br>range of $C_5$ to $C_8$ and<br>boiling in the range of<br>approximately 66°C<br>to 121°C (151°F to<br>250°F).) |              |           |            |
| Gasoline; Low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>consisting primarily<br>of paraffins,<br>cycloparaffins,<br>aromatic and olefinic<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_3$ and boiling<br>in the range of 30°C<br>to 260°C (86°F to<br>500°F).)   | 649-378-00-4 | 289-220-8 | 86290-81-5 |
| Aromatic<br>hydrocarbons, C <sub>7—8</sub> ,<br>dealkylation products,<br>distn. residues; Low<br>boiling point naphtha<br>—unspecified   | 649-379-00-X | 292-698-0 | 90989-42-7 |
| Hydrocarbons, C <sub>4</sub><br><u>-6</u> , depentanizer<br>lights, arom.<br>hydrotreater; Low<br>boiling point naphtha<br><u></u> unspecified (A<br>complex combination<br>of hydrocarbons   | 649-380-00-5 | 295-298-4 | 91995-38-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| obtained as first<br>runnings from the<br>depentanizer column<br>before hydrotreatment<br>of the aromatic<br>charges. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_4$ through<br>$C_6$ , predominantly<br>pentanes and<br>pentenes, and boiling<br>in the range of<br>approximately 25°C to<br>40°C (77°F to 104°F).)                                      |              |           |            |
| Distillates (petroleum),<br>heat-soaked steam-<br>cracked naphtha, $C_5$<br>rich; Low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of heat-soaked steam-<br>cracked naphtha. It<br>consists predominantly<br>of hydrocarbons<br>having carbon<br>numbers in the range<br>of C <sub>4</sub> through C <sub>6</sub> ,<br>predominantly C <sub>5</sub> . | 649-381-00-0 | 295-302-4 | 91995-41-4 |
| Extracts (petroleum),<br>catalytic reformed<br>light naphtha<br>solvent; low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>extract from the<br>solvent extraction of a<br>catalytically reformed<br>petroleum cut. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having   | 649-382-00-6 | 295-331-2 | 91995-68-5 |

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| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_8$ and<br>boiling in the range of<br>approximately 100°C<br>to 200°C (212°F to<br>392°F).)  |              |           |            |
| Naphtha (petroleum),<br>hydrodesulphurized<br>light, dearomatized;<br>low boiling point<br>naphtha—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>by distillation of<br>hydrodesulphurized<br>and dearomatized light<br>petroleum fractions. It<br>consists predominantly<br>of C <sub>7</sub> paraffins<br>and cycloparaffins<br>boiling in a range of<br>approximately 90°C<br>to 100°C (194°F to<br>212°F).)   | 649-383-00-1 | 295-434-2 | 92045-53-9 |
| Naphtha (petroleum),<br>light, $C_5$ -rich,<br>sweetened; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>a petroleum naphtha to<br>a sweetening process<br>to convert mercaptans<br>or to remove<br>acidic impurities.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>4</sub> through<br>C <sub>5</sub> , predominantly<br>C <sub>5</sub> , and boiling<br>in the range of<br>approximately $-10^{\circ}$ C | 649-384-00-7 | 295-442-6 | 92045-60-8 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| to 35°C (14°F to<br>95°F).)   |              |           |            |
| Hydrocarbons, $C_{8-11}$ , naphtha-cracking,<br>toluene cut; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>from prehydrogenated<br>cracked naphtha.<br>It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_8$<br>through $C_{11}$ and<br>boiling in the range of<br>approximately 130°C<br>to 205°C (266°F to<br>401°F).)  | 649-385-00-2 | 295-444-7 | 92045-62-0 |
| Hydrocarbons, C <sub>4</sub> —<br>11, naphtha-cracking;<br>aromfree; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>prehydrogenated<br>cracked naphtha after<br>distillative separation<br>of benzene- and<br>toluene-containing<br>hydrocarbon cuts<br>and a higher boiling<br>fraction. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>4</sub><br>through C <sub>11</sub> and<br>boiling in the range of<br>approximately 30°C<br>to 205°C (86°F to<br>401°F).) | 649-386-00-8 | 295-445-2 | 92045-63-1 |

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| Substances   | Index number | EC number | CAS number |
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| Naphtha (petroleum),<br>light heat-soaked,<br>steam-cracked; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>fractionation of steam<br>cracked naphtha<br>after recovery from<br>a heat soaking<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_4$<br>through $C_6$ and<br>boiling in the range of<br>approximately 0°C to<br>80°C (32°F to 176°F).) | 649-387-00-3 | 296-028-8 | 92201-97-3 |
| Distillates (petroleum),<br>C <sub>6</sub> -rich low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from the<br>distillation of a<br>petroleum feedstock. It<br>consists predominantly<br>of hydrocarbons<br>having carbon<br>numbers of C <sub>5</sub> through<br>C <sub>7</sub> , rich in C <sub>6</sub> , and<br>boiling in the range of<br>approximately 60°C<br>to 70°C (140°F to<br>158°F).)  | 649-388-00-9 | 296-903-4 | 93165-19-6 |
| Gasoline, pyrolysis,<br>hydrogenated;<br>low boiling point<br>naphtha—unspecified<br>(A distillation<br>fraction from the<br>hydrogenation of<br>pyrolysis gasoline<br>boiling in the range of<br>approximately 20°C   | 649-389-00-4 | 302-639-3 | 94114-03-1 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| to 200°C (68°F to 392°F).)   |              |           |            |
| Distillates (petroleum),<br>steam-cracked, $C_{8-}$<br>$_{12}$ fraction, polymd.,<br>distn. lights; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of the polymerized $C_8$<br>through $C_{12}$ fraction<br>from steam-cracked<br>petroleum distillates. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_8$ through<br>$C_{12}$ .)   |              | 305-750-5 | 95009-23-7 |
| Extracts (petroleum);<br>heavy naphtha solvent,<br>clay-treated; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of heavy<br>naphthic solvent<br>petroleum extract<br>with bleaching<br>earth. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_{18}$ , and<br>boiling in the range of<br>approximately $80^{\circ}C$<br>to $180^{\circ}C$ ( $175^{\circ}F$ to<br>$356^{\circ}F$ ).) | 649-391-00-5 | 308-261-5 | 97926-43-7 |
| Naphtha (petroleum),<br>light steam-cracked,<br>debenzenized,<br>thermally treated; low<br>boiling point naphtha   | 649-392-00-0 | 308-713-1 | 98219-46-6 |
|  |              | 191       |            |

| Substances          | Index number | EC number | CAS number |
|---------------------|--------------|-----------|------------|
|                     |              |           |            |
| complex combination |              |           |            |
| of hydrocarbons     |              |           |            |
| obtained by the     |              |           |            |
| treatment and       |              |           |            |
| distillation of     |              |           |            |
| debenzenized        |              |           |            |

-unspecified (A complex combination of hydrocarbons

| distillation of<br>debenzenized<br>light steam-<br>cracked petroleum<br>naphtha. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_7$<br>through $C_{12}$ and<br>boiling in the range of<br>approximately 95°C<br>to 200°C (203°F to<br>392°F).)  |              |           |             |
|---|--------------|-----------|-------------|
| Naphtha (petroleum),<br>light steam-cracked,<br>thermally treated;<br>low boiling point<br>naphtha—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>by the treatment<br>and distillation<br>of light steam-<br>cracked petroleum<br>naphtha. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_6$ and<br>boiling in the range of<br>approximately 35°C to<br>80°C (95°F to 176°F).) | 649-393-00-6 | 308-714-7 | 98219-47-7  |
| Distillates (petroleum),<br>$C_{79}$ , $C_8$ -rich,<br>hydrodesulphurized<br>dearomatized; low<br>boiling point naphtha   | 649-394-00-1 | 309-862-5 | 101316-56-7 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| bbtained by<br>he distillation<br>of petroleum<br>ight fraction,<br>hydrodesulphurized<br>and dearomatized. It<br>consists predominantly<br>of hydrocarbons<br>having carbon<br>numbers in the<br>ange of $C_7$ through<br>$C_9$ , predominantly<br>$C_8$ paraffins and<br>cycloparaffins,<br>poiling in the range of<br>approximately 120°C<br>to 130°C (248°F to<br>266°F).)  |              |           |             |
| Hydrocarbons, $C_{68}$ ,<br>hydrogenated sorption-<br>dearomatized, toluene<br>raffination; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained during the<br>sorption of toluene<br>from a hydrocarbon<br>fraction from cracked<br>gasoline treated<br>with hydrogen in<br>the presence of a<br>catalyst. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_6$<br>through $C_8$ and<br>boiling in the range of<br>approximately $80^{\circ}C$<br>to $135^{\circ}C$ ( $176^{\circ}F$ to<br>$275^{\circ}F$ ).) | 649-395-00-7 | 309-870-9 | 101316-66-9 |
| laphtha (petroleum),<br>ydrodesulphurized<br>ull-range coker; low<br>oiling point naphtha<br>–unspecified (A<br>omplex combination  | 649-396-00-2 | 309-879-8 | 101316-76-1 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| of hydrocarbons<br>obtained by<br>fractionation from<br>hydrodesulphurized<br>coker distillate.<br>It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_5$ to $C_{11}$ and<br>boiling in the range of<br>approximately 23°C<br>to 196°C (73°F to<br>385°F).)  |              |           |             |
| Naphtha (petroleum),<br>sweetened light; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by subjecting<br>a petroleum naphtha to<br>a sweetening process<br>to convert mercaptans<br>or to remove acidic<br>impurities. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_5$<br>through $C_8$ and<br>boiling in the range of<br>approximately 20°C to<br>130°C (68°F to 266°F) | 649-397-00-8 | 309-976-5 | 101795-01-1 |
| Hydrocarbons, C <sub>3</sub><br><u>-6</u> , C <sub>5</sub> -rich, steam-<br>cracked naphtha; low<br>boiling point naphtha<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of steam-cracked<br>naphtha. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers in the   | 649-398-00-3 | 310-012-0 | 102110-14-5 |

| dicyclopentadiene-<br>contg.; low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of the products from<br>a steam-cracking<br>process. It consists<br>predominantly<br>of hydrocarbons<br>having carbon<br>numbers of $C_5$ and<br>dicyclopentadiene and<br>boiling in the range of<br>approximately 30°C<br>to 170°C (86°F to<br>338°F).)   | Substances   | Index number | EC number | CAS number  |
|---|--|--------------|-----------|-------------|
| dicyclopentadiene-<br>contg.; low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of the products from<br>a steam-cracking<br>process. It consists<br>predominantly<br>of hydrocarbons<br>having carbon<br>numbers of $C_5$ and<br>dicyclopentadiene and<br>boiling in the range of<br>approximately 30°C<br>to 170°C (86°F to<br>338°F).)<br>Residues (petroleum), 649-400-00-2 310-057-6 102110-<br>steam-cracked light,<br>arom.; low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>distillation of the<br>products of steam<br>cracking or similar<br>processes after taking<br>off the very light<br>products resulting<br>in a residue starting<br>with hydrocarbons<br>having carbon<br>numbers greater<br>than $C_5$ . It consists<br>predominantly of<br>aromatic hydrocarbons<br>having carbon<br>numbers greater than | • • •  |              |           |             |
| steam-cracked light,<br>arom.; low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>distillation of the<br>products of steam<br>cracking or similar<br>processes after taking<br>off the very light<br>products resulting<br>in a residue starting<br>with hydrocarbons<br>having carbon<br>numbers greater<br>than $C_5$ . It consists<br>predominantly of<br>aromatic hydrocarbons<br>having carbon<br>numbers greater than  | dicyclopentadiene-<br>contg.; low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of the products from<br>a steam-cracking<br>process. It consists<br>predominantly<br>of hydrocarbons<br>having carbon<br>numbers of $C_5$ and<br>dicyclopentadiene and<br>boiling in the range of<br>approximately 30°C<br>to 170°C (86°F to<br>338°F).)  |              |           | 102110-15-6 |
| above approximately<br>40°C (104°F)   | steam-cracked light,<br>arom.; low boiling<br>point naphtha—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>distillation of the<br>products of steam<br>cracking or similar<br>processes after taking<br>off the very light<br>products resulting<br>in a residue starting<br>with hydrocarbons<br>having carbon<br>numbers greater<br>than $C_5$ . It consists<br>predominantly of<br>aromatic hydrocarbons<br>having carbon<br>numbers greater than<br>$C_5$ and boiling point<br>above approximately | 649-400-00-2 | 310-057-6 | 102110-55-4 |
|   | Hydrocarbons, $C_5$ , $C_5$  | 649-401-00-8 | 270-690-8 | 68476-50-6  |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| point naphtha—<br>unspecified  |              |           |            |
| Hydrocarbons, C <sub>5-6</sub> -<br>rich; low boiling point<br>naphtha—unspecified   | 649-402-00-3 | 270-695-5 | 68476-55-1 |
| Aromatic<br>hydrocarbons, C <sub>8–10</sub> ;<br>Light Oil redistillate,<br>high boiling   | 649-403-00-9 | 292-695-4 | 90989-39-2 |
| Distillates (petroleum),<br>light catalytic cracked;<br>Cracked gas oil (A<br>complex combination<br>of hydrocarbons<br>produced by the<br>distillation of<br>products from a<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>9</sub><br>through C <sub>25</sub> and<br>boiling in the range<br>of approximately<br>$150^{\circ}$ C to 400°C<br>(302°F to 752°F). It<br>contains a relatively<br>large proportion of<br>bicyclic aromatic<br>hydrocarbons.) | 649-435-00-3 | 265-060-4 | 64741-59-9 |
| Distillates (petroleum),<br>intermediate catalytic<br>cracked; Cracked<br>gas oil (A complex<br>combination of<br>hydrocarbons<br>produced by the<br>distillation of<br>products from a<br>catalytic cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$<br>through $C_{30}$ and<br>boiling in the range   | 649-436-00-9 | 265-062-5 | 64741-60-2 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| of approximately<br>205°C to 450°C<br>(401°F to 842°F). It<br>contains a relatively<br>large proportion of<br>tricyclic aromatic<br>hydrocarbons.)  |              |           |            |
| Distillates (petroleum),<br>ight thermal cracked;<br>Cracked gas oil (A<br>omplex combination<br>of hydrocarbons from<br>he distillation of<br>he products from<br>thermal cracking<br>process. It consists<br>predominantly<br>of unsaturated<br>hydrocarbons having<br>arbon numbers<br>predominantly in<br>he range of $C_{10}$<br>hrough $C_{22}$ and<br>poiling in the range of<br>pproximately 160°C<br>to 370°C (320°F to<br>198°F).)  | 649-438-00-X | 265-084-5 | 64741-82-8 |
| Distillates (petroleum),<br>ydrodesulphurized<br>ght catalytic cracked;<br>Cracked gas oil (A<br>omplex combination<br>f hydrocarbons<br>btained by treating<br>ght catalytic<br>racked distillates<br>vith hydrogen to<br>onvert organic<br>ulphur to hydrogen<br>ulphide which is<br>emoved. It consists of<br>ydrocarbons having<br>arbon numbers<br>redominantly in<br>he range of C <sub>9</sub><br>nrough C <sub>25</sub> and<br>oiling in the range<br>f approximately<br>50°C to 400°C<br>302°F to 752°F). It | 649-439-00-5 | 269-781-5 | 68333-25-5 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| contains a relatively<br>large proportion of<br>bicyclic aromatic<br>hydrocarbons.)   |              |           |            |
| Distillates (petroleum),<br>light steam-cracked<br>naphtha; Cracked<br>gas oil (A complex<br>combination of<br>hydrocarbons from the<br>multiple distillation<br>of products from<br>a steam cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{10}$ through<br>$C_{18}$ .)   | 649-440-00-0 | 270-662-5 | 68475-80-9 |
| Distillates (petroleum),<br>cracked steam-cracked<br>petroleum distillates;<br>Cracked gas oil (A<br>complex combination<br>of hydrocarbons<br>produced by distilling<br>cracked steam cracked<br>distillate and/or<br>its fractionation<br>products. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{10}$ to low<br>molecular weight<br>polymers.) | 649-441-00-6 | 270-727-8 | 68477-38-3 |
| Gas oils (petroleum),<br>steam-cracked;<br>Cracked gas oil (A<br>complex combination<br>of hydrocarbons<br>produced by<br>distillation of the<br>products from a<br>steam cracking<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than C <sub>9</sub> and boiling  | 649-442-00-1 | 271-260-2 | 68527-18-4 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| in the range of from<br>approximately 205°C<br>to 400°C (400°F to<br>752°F).)  |              |           |            |
| Distillates (petroleum),<br>hydrodesulphurized<br>thermal cracked<br>middle; Cracked<br>gas oil (A complex<br>combination of<br>hydrocarbons obtained<br>by fractionation from<br>hydrodesulphurized<br>thermal cracker<br>distillate stocks.<br>It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{11}$ to<br>$C_{25}$ and boiling in<br>the range of from<br>approximately 205°C<br>to 400°C (401°F to<br>752°F).) | 649-443-00-7 | 285-505-6 | 85116-53-6 |
| Gas oils (petroleum),<br>thermal-cracked,<br>hydrodesulphurized;<br>Cracked gas oil  | 649-444-00-2 | 295-411-7 | 92045-29-9 |
| Residues (petroleum),<br>hydrogenated steam-<br>cracked naphtha;<br>Cracked gas oil (A<br>complex combination<br>of hydrocarbons<br>obtained as a residual<br>fraction from the<br>distillation of<br>hydrotreated steam-<br>cracked naphtha. It<br>consists predominantly<br>of hydrocarbons<br>boiling in the range of<br>approximately 200°C<br>to 350°C (392°F to<br>662°F).)  | 649-445-00-8 | 295-514-7 | 92062-00-5 |
| Residues (petroleum),<br>steam-cracked naphtha<br>distn.; Cracked gas  | 649-446-00-3 | 295-517-3 | 92062-04-9 |

**Substances Index number EC number CAS** number oil (A complex combination of hydrocarbons obtained as a column bottom from the separation of effluents from steam cracking naphtha at a high temperature. It boils in the range of approximately 147°C to 300°C (297°F to 572°F) and produces a finished oil having a viscosity of 18 cSt at 50°C.) Distillates (petroleum), 649-447-00-9 295-991-1 92201-60-0 light catalytic cracked, thermally degraded; Cracked gas oil (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process which has been used as a heat transfer fluid. It consists predominantly of hydrocarbons boiling in the range of approximately 190°C to 340°C (374°F to 644°F). This steam is likely to contain organic sulphur compounds.) 649-448-00-4 297-905-8 93763-85-0 Residues (petroleum), steam-cracked, heatsoaked naphtha; Cracked gas oil (A complex combination of hydrocarbons obtained as residue from the distillation of steam-cracked heatsoaked naphtha and boiling in the range of

approximately 150°C

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| to 350°C (302°F to<br>662°F).)  |              |           |             |
| Gas oils (petroleum),<br>light vacuum,<br>thermal-cracked,<br>hydrodesulphurized;<br>Cracked gas oil (A<br>complex combination<br>of hydrocarbons<br>obtained by catalytic<br>dehydrosulphurization<br>of thermal-cracked<br>light vacuum<br>petroleum. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{14}$<br>through $C_{20}$ and<br>boiling in the range of<br>approximately 270°C<br>to 370°C (518°F to<br>698°F).) | 649-450-00-5 | 308-278-8 | 97926-59-5  |
| Distillates (petroleum),<br>hydrodesulphurized<br>middle coker; Cracked<br>gas oil (A complex<br>combination of<br>hydrocarbons by<br>fractionation from<br>hydrodesulphurized<br>coker distillate<br>stocks. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{12}$<br>through $C_{25}$ and<br>boiling in the range of<br>approximately 200°C<br>to 360°C (392°F to<br>680°F).)  | 649-451-00-0 | 309-865-1 | 101316-59-0 |
| Distillates (petroleum),<br>heavy steam-cracked;<br>Cracked gas oil (A<br>complex combination<br>of hydrocarbons<br>obtained by distillation<br>of steam cracking   | 649-452-00-6 | 309-939-3 | 101631-14-5 |

**CAS number** 

| of highly alkylated<br>heavy aromatic<br>hydrocarbons boiling<br>in the range of<br>approximately 250°C<br>to 400°C (482°F to<br>752°F).)   |           |            |
|---|-----------|------------|
| Distillates (petroleum),<br>heavy hydrocracked;<br>Base oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons from<br>the distillation of<br>the products from<br>a hydro cracking<br>process. It consists<br>predominantly of<br>saturated hydrocarbons<br>having carbon<br>numbers in the range<br>of $C_{15}$ through $C_{39}$ and<br>boiling in the range of<br>approximately 260°C<br>to 600°C (500°F to | 265-077-7 | 64741-76-0 |

265-090-8

**EC number** 

**Index number** 

Distillates (petroleum), 649-454-00-7 solvent-refined heavy paraffinic; Base oil -unspecified (A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of  $C_{20}$  through C<sub>50</sub> and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19 cSt at 40°C).)

Substances

1112°F).)

heavy residues. It consists predominantly

64741-88-4

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Distillates (petroleum),<br>solvent-refined light<br>parafinnic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>raffinate from a<br>solvent extraction<br>process. It consists<br>predominantly<br>of saturated<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil having a<br>viscosity of less than<br>100 SUS at 100°F (19<br>cSt at 40°C).) | 649-455-00-2 | 265-091-3 | 64741-89-5 |
| Residual oils<br>(petroleum), solvent<br>deasphalted; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>solvent soluble<br>fraction from $C_3$ -; $C_4$<br>solvent de asphalting<br>of a residuum.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly higher<br>than $C_{25}$ and boiling<br>above approximately<br>$400^{\circ}C$ (752°F).)   | 649-456-00-8 | 265-096-0 | 64741-95-3 |
| Distillates (petroleum),<br>solvent-refined heavy<br>naphthenic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>raffinate from a<br>solvent extraction<br>process. It consists of<br>hydrocarbons having  | 649-457-00-3 | 265-097-6 | 64741-96-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C.) It<br>contains relatively few<br>normal paraffins.)   |              |           |            |
| Distillates (petroleum),<br>solvent-refined light<br>naphthenic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the<br>raffinate from a<br>solvent extraction<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil with a<br>viscosity of less than<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-458-00-9 | 265-098-1 | 64741-97-5 |
| Residual oils<br>(petroleum), solvent-<br>refined; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained as the solvent<br>insoluble fraction from<br>solvent refining of<br>a residuum using a<br>polar organic solvent<br>such as phenol or<br>furfural. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{25}$ and boiling<br>above approximately<br>$400^{\circ}C$ (752°F).)   | 649-459-00-4 | 265-101-6 | 64742-01-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Distillates (petroleum)<br>clay-treated paraffinic;<br>Base oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons resulting<br>from treatment of a<br>petroleum fraction<br>with natural or<br>modified clay in<br>either a contacting<br>or percolation<br>process to remove<br>the trace amounts<br>of polar compounds<br>and impurities<br>present. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{20}$<br>through $C_{50}$ and<br>produces a finished<br>oil with a viscosity<br>of at least 100 SUS<br>at 100°F (19 cSt at<br>40°C). It contains<br>a relatively large<br>proportion of saturated<br>hydrocarbons.) | 649-460-00-X | 265-137-2 | 64742-36-5 |
| Distillates (petroleum),<br>clay-treated light<br>paraffinic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>resulting from<br>treatment of a<br>petroleum fraction<br>with natural or<br>modified clay in<br>either a contacting<br>or percolation<br>process to remove<br>the trace amounts<br>of polar compounds<br>and impurities<br>present. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the   | 649-461-00-5 | 265-138-8 | 64742-37-6 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| range of $C_{15}$ through $C_{30}$ and produces<br>a finished oil with<br>a viscosity of less<br>than 100 SUS at<br>100°F (19 cSt at<br>40°C). It contains<br>a relatively large<br>proportion of saturated<br>hydrocarbons.)  |              |           |            |
| Residual oils<br>(petroleum), clay-<br>treated; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the<br>treatment of a residual<br>oil with a natural<br>or modified clay in<br>either a contacting<br>or percolation<br>process to remove<br>the trace amounts<br>of polar compounds<br>and impurities<br>present. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{25}$ and boiling<br>above approximately<br>$400^{\circ}C$ (752°F).) | 649-462-00-0 | 265-143-5 | 64742-41-2 |
| Distillates (petroleum),<br>clay-treated heavy<br>naphthenic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>resulting from<br>treatment of a<br>petroleum fraction<br>with a natural or<br>modified clay in<br>either a contacting<br>or percolation<br>process to remove<br>the trace amounts<br>of polar compounds<br>and impurities  | 649-463-00-6 | 265-146-1 | 64742-44-5 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| present. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>ange of $C_{20}$ through<br>$C_{50}$ and produces a<br>inished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>19 cSt at 40°C). It<br>contains relatively few<br>hormal paraffins.)   |              |           |            |
| bistillates (petroleum),<br>lay-treated light<br>aphthenic; Base oil<br>–unspecified (A<br>omplex combination<br>f hydrocarbons<br>esulting from<br>eatment of a<br>etroleum fraction<br>with natural or<br>nodified clay in<br>ither a contacting<br>r percolation<br>rocess to remove<br>he trace amounts<br>f polar compounds<br>nd impurities<br>resent. It consists of<br>ydrocarbons having<br>arbon numbers<br>redominantly in the<br>ange of C <sub>15</sub> through<br>$C_{15}$ through<br>$C_{10}$ and produces a<br>nished oil with a<br>iscosity of less than<br>00 SUS at 100°F<br>19 cSt at 40°C). It<br>ontains relatively few<br>ormal paraffins.) | 649-464-00-1 | 265-147-7 | 64742-45-6 |
| stillates (petroleum),<br>drotreated heavy<br>ohthenic; Base oil<br>inspecified (A<br>nplex combination<br>hydrocarbons<br>ained by treating<br>etroleum fraction<br>h hydrogen in   | 649-465-00-7 | 265-155-0 | 64742-52-5 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of $C_{20}$ through $C_{50}$ and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19 cSt at 40°C). It contains relatively few normal paraffins.)   |              |           |            |
| Distillates (petroleum),<br>hydrotreated light<br>naphthenic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction<br>with hydrogen in<br>the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil with a<br>viscosity of less than<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-466-00-2 | 265-156-6 | 64742-53-6 |
| Distillates (petroleum),<br>hydrotreated heavy<br>paraffinic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction<br>with hydrogen in<br>the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through  | 649-467-00-8 | 265-157-1 | 64742-54-7 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| $C_{50}$ and produces<br>a finished oil of at<br>least 100 SUS at<br>100°F (19 cSt at<br>40°C). It contains<br>a relatively large<br>proportion of saturated<br>hydrocarbons.)  | Index number |           |            |
| Distillates (petroleum),<br>hydrotreated light<br>paraffinic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction<br>with hydrogen in<br>the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces<br>a finished oil with<br>a viscosity of less<br>than 100 SUS at<br>100°F (19 cSt at<br>40°C). It contains<br>a relatively large<br>proportion of saturated<br>hydrocarbons.) | 649-468-00-3 | 265-158-7 | 64742-55-8 |
| Distillates (petroleum),<br>solvent-dewaxed light<br>paraffinic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by removal<br>of normal paraffins<br>from a petroleum<br>fraction by solvent<br>crystallization.<br>It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a   | 649-469-00-9 | 265-159-2 | 64742-56-9 |

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| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| finished oil with a<br>viscosity of less than<br>100 SUS at 100°F (19<br>cSt at -40°C).)   |              |           |            |
| Residual oils<br>(petroleum),<br>hydrotreated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction<br>with hydrogen in<br>the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{25}$ and boiling<br>above approximately<br>$400^{\circ}C$ (752°F).)                           | 649-470-00-4 | 265-160-8 | 64742-57-0 |
| Residual oils<br>(petroleum), solvent-<br>dewaxed; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by removal<br>of long, branched<br>chain hydrocarbons<br>from a residual oil by<br>solvent crystallization.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly greater<br>than $C_{25}$ and boiling<br>above approximately<br>$400^{\circ}C$ (752°F).) | 649-471-00-X | 265-166-0 | 64742-62-7 |
| Distillates (petroleum),<br>solvent-dewaxed<br>heavy naphthenic;<br>Base oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>by removal of normal<br>paraffins from a<br>petroleum fraction by<br>solvent crystallization.   | 649-472-00-5 | 265-167-6 | 64742-63-8 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ and produces a<br>finished oil of not less<br>than 100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.)  |              |           |            |
| Distillates (petroleum),<br>solvent-dewaxed light<br>naphthenic; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by removal<br>of normal paraffins<br>from a petroleum<br>fraction by solvent<br>crystallization.<br>It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil with a<br>viscosity of less than<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-473-00-0 | 265-168-1 | 64742-64-9 |
| Distillates (petroleum),<br>solvent-dewaxed<br>neavy paraffinic; Base<br>bil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by removal<br>of normal paraffins<br>from a petroleum<br>fraction by solvent<br>crystallization.<br>t consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the  | 649-474-00-6 | 265-169-7 | 64742-65-0 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| range of $C_{20}$ through $C_{50}$ and produces a finished oil with a viscosity of not less than 100 SUS at 100°F (19 cSt at 40°C).)  |              |           |            |
| Naphthenic oils<br>(petroleum), catalytic<br>dewaxed heavy; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>catalytic dewaxing<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ and produces a<br>finished oil with a<br>viscosity of at least<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-475-00-1 | 265-172-3 | 64742-68-3 |
| Naphthenic oils<br>(petroleum), catalytic<br>dewaxed light; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>catalytic dewaxing<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil with a<br>viscosity of less than<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.)                 | 649-476-00-7 | 265-173-9 | 64742-69-4 |
| Paraffin oils<br>(petroleum), catalytic<br>dewaxed heavy; Base  | 649-477-00-2 | 265-174-4 | 64742-70-7 |
|   |              | 212       |            |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| bil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>catalytic dewaxing<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>oredominantly in the<br>ange of $C_{20}$ through<br>$C_{50}$ and produces a<br>inished oil with a<br>viscosity of at least<br>00 SUS at 100°F (19<br>eSt at 40°C).)  |              |           |            |
| araffin oils<br>betroleum), catalytic<br>ewaxed light; Base<br>l—unspecified (A<br>omplex combination<br>c hydrocarbons<br>btained from a<br>ttalytic dewaxing<br>rocess. It consists<br>redominantly of<br>ydrocarbons having<br>urbon numbers<br>redominantly in the<br>nge of $C_{15}$ through<br>$a_{0}$ and produces a<br>nished oil with a<br>scosity of less than<br>00 SUS at 100°F (19<br>St at 40°C).) | 649-478-00-8 | 265-176-5 | 64742-71-8 |
| Naphthenic oils<br>(petroleum), complex<br>dewaxed heavy; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by removing<br>straight chain paraffin<br>hydrocarbons as a<br>solid by treatment<br>with an agent such<br>as urea. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the   | 649-479-00-3 | 265-179-1 | 64742-75-2 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| range of $C_{20}$ through $C_{50}$ and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19 cSt at 40°C). It contains relatively few normal paraffins.)   |              |           |            |
| Naphthenic oils<br>(petroleum), complex<br>dewaxed light; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>catalytic dewaxing<br>process. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil having a<br>viscosity less than 100<br>SUS at 100°F (19 cSt<br>at 40°C). It contains<br>relatively few normal<br>paraffins.)                                       | 649-480-00-9 | 265-180-7 | 64742-76-3 |
| Lubricating oils<br>(petroleum), $C_{20}$<br>$_{50}$ , hydrotreated<br>neutral oil-based high-<br>viscosity; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>light vacuum gas<br>oil; heavy vacuum<br>gas oil, and solvent<br>deasphalted residual<br>oil with hydrogen<br>in the presence of a<br>catalyst in a two stage<br>process with dewaxing<br>being carried out<br>between the two<br>stages. It consists<br>predominantly of<br>hydrocarbons having | 649-481-00-4 | 276-736-3 | 72623-85-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| carbon numbers<br>predominantly in<br>the range of $C_{20}$<br>through $C_{50}$ and<br>produces a finished<br>oil having a viscosity<br>of approximately 112<br>cSt at 40°C. It contains<br>a relatively large<br>proportion of saturated<br>hydrocarbons.)   |              |           |            |
| Lubricating oils<br>(petroleum), $C_{15-30}$ ,<br>hydrotreated neutral<br>oil-based; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>light vacuum gas oil<br>and heavy vacuum<br>gas oil with hydrogen<br>in the presence of a<br>catalyst in a two stage<br>process with dewaxing<br>being carried out<br>between the two<br>stages. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{15}$<br>through $C_{30}$ and<br>produces a finished<br>oil having a viscosity<br>of approximately 15<br>cSt at 40°C. It contains<br>a relatively large<br>proportion of saturated<br>hydrocarbons.) | 649-482-00-X | 276-737-9 | 72623-86-0 |
| Lubricating oils<br>(petroleum), C <sub>20-50</sub> ,<br>hydrotreated neutral<br>oil-based; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>light vacuum gas   | 649-483-00-5 | 276-738-4 | 72623-87-1 |

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| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| oil, heavy vacuum<br>gas oil and solvent<br>deasphalted residual<br>oil with hydrogen<br>in the presence of a<br>catalyst in a two stage<br>process with dewaxing<br>being carried out<br>between the two<br>stages. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{20}$<br>through $C_{50}$ and<br>produces a finished<br>oil with a viscosity of<br>approximately 32 cSt<br>at 40°C. It contains<br>a relatively large<br>proportion of saturated<br>hydrocarbons.) |              |           |            |
| Lubricating oils; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from<br>solvent extraction<br>and dewaxing<br>processes. It consists<br>predominantly of<br>saturated hydrocarbons<br>having carbon<br>numbers in the range<br>of C <sub>15</sub> through C <sub>50</sub> .)   | 649-484-00-0 | 278-012-2 | 74869-22-0 |
| Distillates (petroleum),<br>complex dewaxed<br>heavy paraffinic; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by dewaxing<br>heavy paraffinic<br>distillate. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>20</sub> through   | 649-485-00-6 | 292-613-7 | 90640-91-8 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| $C_{50}$ and produces a<br>finished oil with a<br>viscosity of equal to<br>or greater than 100<br>SUS at 100°F (19 cSt<br>at 40°C). It contains<br>relatively few normal<br>paraffins.)   |              |           |            |
| Distillates (petroleum),<br>complex dewaxed<br>light paraffinic; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by dewaxing<br>light paraffinic<br>distillate. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{12}$ through<br>$C_{30}$ and produces a<br>finished oil with a<br>viscosity of less than<br>100 SUS at 100°F<br>(19 cSt at 40°C). It<br>contains relatively few<br>normal paraffins.) | 649-486-00-1 | 292-614-2 | 90640-92-9 |
| Distillates (petroleum),<br>solvent-dewaxed<br>heavy paraffinic,<br>clay-treated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>dewaxed heavy<br>paraffinic distillate<br>with neutral or<br>modified clay in<br>either a contacting<br>or percolation<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50}$ .)                                       | 649-487-00-7 | 292-616-3 | 90640-94-1 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| Hydrocarbons, $C_{20}$<br>50, solvent-dewaxed<br>heavy paraffinic,<br>hydrotreated; Base<br>oil—unspecified(A<br>complex combination<br>of hydrocarbons<br>produced by treating<br>dewaxed heavy<br>paraffinic distillate<br>with hydrogen in<br>the presence of a<br>catalyst. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>20</sub> through<br>C <sub>50</sub> .)                                | 649-488-00-2 | 292-617-9 | 90640-95-2 |
| Distillates (petroleum),<br>solvent-dewaxed<br>light paraffinic clay-<br>treated; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>resulting from<br>treatment of dewaxed<br>light paraffinic<br>distillate with natural<br>or modified clay in<br>either a contacting<br>or percolation<br>process. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ .) | 649-489-00-8 | 292-618-4 | 90640-96-3 |
| Distillates (petroleum),<br>solvent-dewaxed<br>light paraffinic, hydro<br>treated; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by treating<br>a dewaxed light<br>paraffinic distillate  | 649-490-00-3 | 292-620-5 | 90640-97-4 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| with hydrogen in<br>the presence of a<br>catalyst. It consists of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ .)  |              |           |            |
| Residual oils<br>(petroleum),<br>hydrotreated solvent<br>dewaxed; Base oil—<br>unspecified  | 649-491-00-9 | 292-656-1 | 90669-74-2 |
| Residual oils<br>(petroleum), catalytic<br>dewaxed; Base oil—<br>unspecified  | 649-492-00-4 | 294-843-3 | 91770-57-9 |
| Distillates (petroleum),<br>dewaxed heavy<br>paraffinic,<br>hydrotreated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from an<br>intensive treatment<br>of dewaxed distillate<br>by hydrogenation<br>in the presence of a<br>catalyst. It consists<br>predominantly of<br>saturated hydrocarbons<br>having carbon<br>numbers in the range<br>of C <sub>25</sub> through C <sub>39</sub> and<br>produces a finished<br>oil with a viscosity of<br>approximately 44 cSt<br>at 50°C.) |              | 295-300-3 | 91995-39-0 |
| Distillates<br>(petroleum), dewaxed<br>light paraffinic,<br>hydrotreated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from an<br>intensive treatment<br>of dewaxed distillate  | 649-494-00-5 | 295-301-9 | 91995-40-3 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| by hydrogenation<br>in the presence of a<br>catalyst. It consists<br>predominantly of<br>saturated hydrocarbons<br>having carbon<br>numbers in the range<br>of $C_{21}$ through $C_{29}$ and<br>produces a finished<br>oil with a viscosity of<br>approximately 13 cSt<br>at 50°C.)   |              |           |            |
| Distillates (petroleum),<br>hydrocracked solvent-<br>refined, dewaxed; base<br>oil— unspecified (A<br>complex combination<br>of liquid hydrocarbons<br>obtained by re-<br>crystallization of<br>dewaxed hydrocracked<br>solvent-refined<br>petroleum distillates)   | 649-495-00-0 | 295-306-6 | 91995-45-8 |
| Distillates (petroleum),<br>solvent-refined<br>light naphthenic,<br>hydrotreated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>a petroleum fraction<br>with hydrogen<br>in the presence<br>of a catalyst and<br>removing the aromatic<br>hydrocarbons by<br>solvent extraction. It<br>consists predominantly<br>of naphthenic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ and produces a<br>finished oil with a<br>viscosity of between<br>13-15 cSt at 40°C.) | 649-496-00-6 | 295-316-0 | 91995-54-9 |
| Lubricating oils (petroleum) C <sub>17</sub>  | 649-497-00-1 | 295-423-2 | 92045-42-6 |

| Substances<br>   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Lubricating oils<br>(petroleum),<br>hydrocracked<br>nonarom. solvent-<br>deparaffined; Base oil<br>—unspecified  | 649-498-00-7 | 295-424-8 | 92045-43-7 |
| Residual oils<br>(petroleum),<br>hydrocracked acid-<br>treated solvent-<br>dewaxed; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>produced by solvent<br>removal of paraffins<br>from the residue of<br>the distillation of acid-<br>treated, hydrocracked<br>heavy paraffins and<br>boiling approximately<br>above 380°C (716°F).) | 649-499-00-2 | 295-499-7 | 92061-86-4 |
| Paraffin oils<br>(petroleum), solvent-<br>refined dewaxed<br>heavy; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained from sulphur-<br>containing paraffinic<br>crude oil. It consists<br>predominantly of<br>a solvent refined<br>deparaffinated<br>lubricating oil with a<br>viscosity of 65 cSt at<br>50°C.)                | 649-500-00-6 | 295-810-6 | 92129-09-4 |
| Lubricating oils<br>(petroleum), base<br>oils, paraffinic; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by refining<br>crude oil. It consists  | 649-501-00-1 | 297-474-6 | 93572-43-1 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| predominantly of<br>aromatics, naphthenics<br>and paraffinics and<br>produces a finished oil<br>with a viscosity of 120<br>SUS at 100°F (23 cSt<br>at 40°C).)   |              |           |            |
| Hydrocarbons,<br>hydrocracked<br>paraffinic distn.<br>residues, solvent-<br>dewaxed; Base oil—<br>unspecified   | 649-502-00-7 | 297-857-8 | 93763-38-3 |
| Hydrocarbons, C <sub>20</sub><br>_50, residual oil<br>hydrogenation vacuum<br>distillate; Base oil—<br>unspecified  | 649-503-00-2 | 300-257-1 | 93924-61-9 |
| Distillates (petroleum),<br>solvent-refined<br>hydrotreated heavy;<br>hydrogenated; Base oil<br>—unspecified  | 649-504-00-8 | 305-588-5 | 94733-08-1 |
| Distillates (petroleum),<br>solvent-refined<br>hydrocracked<br>light; Base oil—<br>unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by solvent<br>dearomatization<br>of the residue of<br>hydrocracked<br>petroleum. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of C <sub>18</sub> through<br>C <sub>27</sub> and boiling in<br>the range of from<br>approximately 370°C<br>to 450°C (698°F to<br>842°F).) | 649-505-00-3 | 305-589-0 | 94733-09-2 |
| Lubricating oils<br>(petroleum), C <sub>18</sub> -40,<br>solvent-dewaxed<br>hydrocracked  | 649-506-00-9 | 305-594-8 | 94733-15-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| distillate-based; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by solvent<br>deparaffination of the<br>distillation residue<br>from hydrocracked<br>petroleum. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{18}$<br>through $C_{40}$ and<br>boiling in the range of<br>approximately 370°C<br>to 550°C (698°F to<br>1022°F).)  |              |           |            |
| Lubricating oils<br>(petroleum), $C_{18}$ -40,<br>solvent-dewaxed<br>hydrogenated<br>raffinate-based; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by solvent<br>deparaffination of the<br>hydrogenated raffinate<br>obtained by solvent<br>extraction of a hydro<br>treated petroleum<br>distillate. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{18}$<br>through $C_{40}$ and<br>boiling in the range of<br>approximately 370°C<br>to 550°C (698°F to<br>1022°F).) | 649-507-00-4 | 305-595-3 | 94733-16-1 |
| Hydrocarbons, C <sub>13</sub><br><sub>30</sub> , aromrich, solvent-<br>extd. napthenic<br>distillate; Base oil<br>unspecified  | 649-508-00-X | 305-971-7 | 95371-04-3 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| Hydrocarbons, C <sub>16</sub><br><sub>32</sub> , aromrich, solvent-<br>extd. naphthenic<br>distillate; Base oil<br>unspecified   | 649-509-00-5 | 305-972-2 | 95371-05-4 |
| Hydrocarbons, C <sub>37—68</sub> ,<br>dewaxed deasphalted<br>hydrotreated vacuum<br>distn. residues; Base<br>oil—unspecified   | 649-510-00-0 | 305-974-3 | 95371-07-6 |
| Hydrocarbons, C <sub>37</sub><br><u>-65</u> , hydrotreated<br>deasphalted vacuum<br>distn. residues; Base<br>oil—unspecified   | 649-511-00-6 | 305-975-9 | 95371-08-7 |
| Distillates (petroleum),<br>hydrocracked solvent-<br>refined light; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the solvent<br>treatment of a distillate<br>from hydrocracked<br>petroleum<br>distillates. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{18}$<br>through $C_{27}$ and<br>boiling in the range of<br>approximately 370°C<br>to 450°C (698°F to<br>842°F).) | 649-512-00-1 | 307-010-7 | 97488-73-8 |
| Distillates (petroleum),<br>solvent-refined<br>hydrogenated heavy;<br>Base oil—unspecified<br>(A complex<br>combination of<br>hydrocarbons obtained<br>by the treatment<br>of a hydrogenated<br>petroleum<br>distillate with a<br>solvent. It consists<br>predominantly of   | 649-513-00-7 | 307-011-2 | 97488-74-9 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{19}$<br>through $C_{40}$ and<br>boiling in the range of<br>approximately 390°C<br>to 550°C (734°F to<br>1022°F).) | 649-514-00-2 | 307-034-8 | 97488-95-4 |
| Lubricating oils<br>(petroleum) $C_{18-27}$ ,<br>hydrocracked solvent-<br>dewaxed; Base oil—<br>unspecified   | 049-514-00-2 | 307-034-8 | 97400-95-4 |
| Hydrocarbons, $C_{17}$<br>  | 649-515-00-8 | 307-661-7 | 97675-87-1 |
| Hydrocarbons, $C_{17}$ —40,<br>hydrotreated solvent-<br>deasphalted distn.<br>Residue, vacuum<br>distn. Lights; Base<br>oil—unspecified (A  | 649-516-00-3 | 307-755-8 | 97722-06-0 |
| • `   |              | 225       |            |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| complex combination<br>of hydrocarbons<br>obtained as first<br>runnings from the<br>vacuum distillation<br>of effluents from<br>the catalytic<br>hydrotreatment of a<br>solvent de asphalted<br>short residue having<br>a viscosity of 8 cSt at<br>approximatly 100°C<br>(212°F). It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{17}$<br>through $C_{40}$ and<br>boiling in the range of<br>approximately 300°C<br>to 500°C (592°F to<br>932°F).)           |              |           |            |
| Hydrocarbons, $C_{13}$<br>$\{27}$ , solvent-extd.<br>Light naphthenic; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by extraction<br>of the aromatics from<br>a light naphthenic<br>distillate having<br>a viscosity of<br>9.5 cSt at 40°C<br>(104°F). It consists<br>predominantly of<br>hydro-carbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{13}$<br>through $C_{27}$ and<br>boiling in the range of<br>approximately 240°C<br>to 400°C (464°F to<br>752°F).) | 649-517-00-9 | 307-758-4 | 97722-09-3 |
| Hydrocarbons, C <sub>14</sub><br>29. solvent-extd.<br>Light naphthenic; Base<br>oil—unspecified (A  | 649-518-00-4 | 307-760-5 | 97722-10-6 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| complex combination<br>of hydrocarbons<br>obtained by extraction<br>of the aromatics from<br>a light naphthenic<br>distillate having<br>a viscosity of<br>16 cSt at 40°C<br>(104°F). It consists<br>predominantly of<br>hydro-carbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{14}$<br>through $C_{29}$ and<br>boiling in the range of<br>approximately 250°C<br>to 425°C (482°F to<br>797°F).) |              |           |             |
| Hydrocarbons, C <sub>27—42</sub> ,<br>dearomatized; Base oil<br>—unspecified  | 649-519-00-X | 308-131-8 | 97862-81-2  |
| Hydrocarbons, C <sub>17</sub><br><u>30</u> , hydrotreated<br>distillates, distn. lights;<br>Base oil—unspecified  | 649-520-00-5 | 308-132-3 | 97862-82-3  |
| Hydrocarbons, C <sub>27</sub> —<br>45, naphthenic vacuum<br>distn.: Base oil—<br>unspecified  | 649-521-00-0 | 308-133-9 | 97862-83-4  |
| Hydrocarbons, C <sub>27—45</sub> ,<br>dearomatized; Base oil<br>—unspecified  | 649-522-00-6 | 308-287-7 | 97926-68-6  |
| Hydrocarbons C <sub>20—58</sub> ,<br>hydrotreated; Base oil<br>—unspecified   | 649-523-00-1 | 308-289-8 | 97926-70-0  |
| Hydrocarbons C <sub>27—42</sub> ,<br>naphthenic; Base oil—<br>unspecified   | 649-524-00-7 | 308-290-3 | 97926-71-1  |
| Residual oils<br>(petroleum), carbon-<br>treated solvent-<br>dewaxed; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by the  | 649-525-00-2 | 309-710-8 | 100684-37-5 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| treatment of solvent-<br>dewaxed petroleum<br>residual oils with<br>activated charcoal for<br>the removal of trace<br>polar constituents and<br>impurities.)   |              |           |             |
| Residual oils<br>(petroleum), clay-<br>treated solvent-<br>dewaxed; Base oil<br>—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by treatment<br>of solvent-dewaxed<br>petroleum residual oils<br>with bleaching earth<br>for the removal of<br>trace polar constituents<br>and impurities.)  | 649-526-00-8 | 309-711-3 | 100684-38-6 |
| Lubricating oils<br>(petroleum), $C_{25}$ ,<br>solvent-extd.,<br>deasphalted, dewaxed,<br>hydrogenated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by solvent<br>extraction and<br>hydrogenation of<br>vacuum distillation<br>residues. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of greater than<br>$C_{25}$ and produces a<br>finished oil with a<br>viscosity in the order<br>of 32 cSt to 37 cSt at<br>100°C (212°F).) | 649-527-00-3 | 309-874-0 | 101316-69-2 |
| Lubricating oils<br>(petroleum), $C_{17}$<br>$\{32}$ , solvent-<br>extd., dewaxed,<br>hydrogenated; Base   | 649-528-00-9 | 309-875-6 | 101316-70-5 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| complex combination<br>of hydrocarbons<br>obtained by solvent<br>extraction and<br>hydrogenation<br>of atmospheric<br>distillation<br>residues. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{17}$ through<br>$C_{32}$ and produces a<br>finished oil with a<br>viscosity in the order<br>of 17 cSt to 23 cSt at<br>40°C (104°F).)   |              |           |             |
| Lubricating oils<br>(petroleum), $C_{20}$<br>35, solvent-<br>extd., dewaxed,<br>hydrogenated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons<br>obtained by solvent<br>extraction and<br>hydrogenation<br>of atmospheric<br>distillation<br>residues. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{35}$ and produces a<br>finished oil having a<br>viscosity in the order<br>of 37 cSt to 44 cSt at<br>40°C (104°F).) | 649-529-00-4 | 309-876-1 | 101316-71-6 |
| Lubricating oils<br>(petroleum), C <sub>24</sub><br><sub>50</sub> , solvent-<br>extd., dewaxed,<br>hydrogenated; Base<br>oil—unspecified (A<br>complex combination<br>of hydrocarbons   | 649-530-00-X | 309-877-7 | 101316-72-7 |

| Substances                                | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| obtained by solvent                       | писх пишост  | EC number | CAS number |
| extraction and                            |              |           |            |
| hydrogenation                             |              |           |            |
| of atmospheric                            |              |           |            |
| distillation                              |              |           |            |
| residues. It consists                     |              |           |            |
| predominantly of                          |              |           |            |
| hydrocarbons having                       |              |           |            |
| carbon numbers predominantly in the       |              |           |            |
| range of $C_{24}$ through                 |              |           |            |
| $C_{50}$ and produces a                   |              |           |            |
| finished oil with a                       |              |           |            |
| viscosity in the order                    |              |           |            |
| of 16 cSt to 75 cSt at                    |              |           |            |
| 40°C (104°F).)                            |              |           |            |
| Extracts (natroloum)                      | 649-531-00-5 | 272-175-3 | 68783-00-6 |
| Extracts (petroleum),<br>heavy naphthenic | 049-551-00-5 | 2/2-1/3-3 | 08/83-00-0 |
| distillate solvent,                       |              |           |            |
| arom. conc.; Distillate                   |              |           |            |
| aromatic extract                          |              |           |            |
| (treated) (An aromatic                    |              |           |            |
| concentrate produced                      |              |           |            |
| by adding water to                        |              |           |            |
| heavy naphthenic<br>distillate solvent    |              |           |            |
| extract and extraction                    |              |           |            |
| solvent.)                                 |              |           |            |
| Extracts (petroleum),                     | 649-532-00-0 | 272-180-0 | 68783-04-0 |
| solvent-refined heavy                     | 047-552-00-0 | 272-100-0 | 00703-04-0 |
| paraffinic distillate                     |              |           |            |
| solvent; Distillate                       |              |           |            |
| aromatic extract                          |              |           |            |
| (treated) (A complex                      |              |           |            |
| combination of                            |              |           |            |
| hydrocarbons obtained                     |              |           |            |
| as the extract from<br>the re-extraction  |              |           |            |
| of solvent-refined                        |              |           |            |
| heavy paraffinic                          |              |           |            |
| distillate. It consists of                |              |           |            |
| saturated and aromatic                    |              |           |            |
| hydrocarbons having                       |              |           |            |
| carbon numbers                            |              |           |            |
| predominantly in the                      |              |           |            |
| range of $C_{20}$ through                 |              |           |            |
| C <sub>50</sub> .)                        |              |           |            |
| Extracts (petroleum),                     | 649-533-00-6 | 272-342-0 | 68814-89-1 |
| heavy paraffinic                          |              |           |            |
| distillates, solvent-                     |              |           |            |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| leasphalted; Distillate<br>aromatic extract<br>(A complex<br>combination of<br>hydrocarbons obtained<br>as the extract from<br>a solvent extraction<br>of heavy paraffinic<br>listillate.)  |              |           |            |
| Extracts (petroleum),<br>neavy naphthenic<br>distillate solvent,<br>nydrotreated; Distillate<br>tromatic extract<br>treated) (A complex<br>combination of<br>nydrocarbons obtained<br>by treating a heavy<br>naphthenic distillate<br>solvent extract<br>with hydrogen in<br>he presence of a<br>catalyst. It consists<br>oredominantly<br>of aromatic<br>nydrocarbons having<br>carbon numbers<br>oredominantly in the<br>ange of $C_{20}$ through<br>$C_{50}$ and produces a<br>inished oil of at least<br>19 cSt at 40°C (100<br>SUS at 100°F).) | 649-534-00-1 | 292-631-5 | 90641-07-9 |
| xtracts (petroleum),<br>eavy paraffinic<br>istillate solvent,<br>ydrotreated;<br>vistillate aromatic<br>xtract (treated) (A<br>omplex combination<br>f hydrocarbons<br>roduced by treating<br>heavy paraffinic<br>istillate solvent<br>xtract with hydrogen<br>the presence of a<br>atalyst. It consists<br>redominantly of<br>ydrocarbons having   | 649-535-00-7 | 292-632-0 | 90641-08-0 |

| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| the range of $C_{21}$<br>through $C_{33}$ and<br>boiling in the range of<br>approximately 350°C<br>to 480°C (662°F to<br>896°F).)  |              |           |            |
| Extracts (petroleum),<br>light paraffinic<br>distillate solvent,<br>hydrotreated;<br>Distillate aromatic<br>extract (treated) (A<br>complex combination<br>of hydrocarbons<br>produced by treating<br>a light paraffinic<br>distillate solvent<br>extract with hydrogen<br>in the presence of a<br>catalyst. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of $C_{17}$<br>through $C_{26}$ and<br>boiling in the range of<br>approximately 280°C<br>to 400°C (536°F to<br>752°F).) | 649-536-00-2 | 292-633-6 | 90641-09-1 |
| Extracts (petroleum),<br>hydrotreated paraffinic<br>light distillate<br>solvent; Distillate<br>aromatic extract<br>(treated) (A complex<br>combination of<br>hydrocarbons obtained<br>as the extract from<br>solvent extraction<br>of intermediate<br>paraffinic top solvent<br>distillate that is treated<br>with hydrogen in<br>the presence of a<br>catalyst. It consists<br>predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers  | 649-537-00-8 | 295-335-4 | 91995-73-2 |

| Substances  | Index number | EC number | CAS number |
|---|--------------|-----------|------------|
| predominantly in the range of $C_{16}$ through $C_{36}$ .)  |              |           |            |
| Extracts (petroleum),<br>light naphthenic<br>distillate solvent,<br>hydro-desulphurized;<br>Distillate aromatic<br>extract (treated) (A<br>complex combination<br>of hydrocarbons<br>obtained by treating<br>the extract, obtained<br>from a solvent<br>extraction process,<br>with hydrogen in the<br>presence of a catalyst<br>under conditions<br>primarily to remove<br>sulphur compounds. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{30}$ . This stream is<br>likely to contain 5 wt.<br>% or more of 4-to 6-<br>membered condensed<br>ring aromatic<br>hydrocarbons.) | 649-538-00-3 | 295-338-0 | 91995-75-4 |
| Extracts (petroleum),<br>light paraffinic<br>distillate solvent, acid-<br>treated; Distillate<br>aromatic extract<br>(treated) (A complex<br>combination of<br>hydrocarbons obtained<br>as a fraction of the<br>distillation of an<br>extract from the<br>solvent extraction of<br>light paraffinic top<br>petroleum distillates<br>that is subjected<br>to a sulphuric acid<br>refining. It consists<br>predominantly  | 649-539-00-9 | 295-339-6 | 91995-76-5 |

**CAS** number

of aromatic hydrocarbons having carbon numbers predominantly in the range of C16 through 649-540-00-4 295-340-1 91995-77-6 Extracts (petroleum), light paraffinic distillate solvent, hydro-desulphurized; Distillate aromatic extract (treated) (A

**EC number** 

**Index number** 

| btained by solvent     |  |
|------------------------|--|
| xtraction of a light   |  |
| araffin distillate and |  |
| eated with hydrogen    |  |
| o convert the organic  |  |
| ulphur to hydrogen     |  |
| ulphide which is       |  |
| liminated. It consists |  |
| redominantly of        |  |
| ydrocarbons having     |  |

carbon numbers predominantly in the range of C15 through  $C_{40}$  and produces a finished oil having a viscosity of greater than 10 cSt at 40 C.) Extracts (petroleum), 649-541-00-X 295-342-2 91995-79-8 light vacuum gas oil solvent, hydrotreated; Distillate aromatic extract (treated) (A

complex combination of hydrocarbons obtained by solvent extraction from light vacuum petroleum gas oils and treated with hydrogen in the presence of a catalyst. It consists predominantly of aromatic hydrocarbons having

carbon numbers predominantly in the

Substances

complex combination of hydrocarbons

C<sub>32</sub>.)

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| Substances   | Index number | EC number | CAS number |
|--|--------------|-----------|------------|
| range of $C_{13}$ through  | Index number | EC number | CAS number |
| C <sub>30</sub> .)   |              |           |            |
| Extracts (petroleum),<br>heavy paraffinic<br>distillate solvent, clay-<br>treated; Distillate<br>aromatic extract<br>(treated) (A complex<br>combination of<br>hydrocarbons resulting<br>from treatment of a<br>petroleum fraction<br>with natural or<br>modified clay in<br>either a contact or<br>percolation process<br>to remove the trace<br>amounts of polar<br>compounds and<br>impurities present. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in<br>the range of C <sub>20</sub><br>through C <sub>50</sub> . This<br>stream is likely to<br>contain 5 wt. % or<br>more 4-6 membered<br>ring aromatic<br>hydrocarbons.) | 649-542-00-5 | 296-437-1 | 92704-08-0 |
| Extracts (petroleum),<br>heavy naphthenic<br>distillate solvent,<br>hydro-desulphurized;<br>Distillate aromatic<br>extract (treated) (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>petroleum stock<br>by treating with<br>hydrogen to convert<br>organic sulphur to<br>hydrogen sulphide<br>which is removed. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having  | 649-543-00-0 | 297-827-4 | 93763-10-1 |

| Substances   | Index number | EC number | CAS number  |
|--|--------------|-----------|-------------|
| carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{50}$ and produces a<br>finished oil with a<br>viscosity of greater<br>than (19 cSt at 40°C).)   |              |           |             |
| Extracts (petroleum),<br>solvent-dewaxed<br>heavy paraffinic<br>distillate solvent,<br>hydrodesulphurized;<br>Distillate aromatic<br>extract (treated) (A<br>complex combination<br>of hydrocarbons<br>obtained from a<br>solvent dewaxed<br>petroleum stock by<br>treating with hydrogen<br>to convert organic<br>sulphur to hydrogen<br>sulphide which is<br>removed. It consists<br>predominantly of<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{15}$ through<br>$C_{50}$ and produces a<br>finished oil with a<br>viscosity of greater<br>than (19 cSt and<br>$40^{\circ}$ C).) | 649-544-00-6 | 297-829-5 | 93763-11-2  |
| Extracts (petroleum),<br>light paraffinic<br>distillate solvent,<br>carbon-treated;<br>Distillate aromatic<br>extract (treated) (A<br>complex combination<br>of hydrocarbons<br>obtained as a fraction<br>from distillation of<br>an extract recovered<br>by solvent extraction<br>of light paraffinic<br>top petroleum<br>distillate treated with<br>activated charcoal   | 649-545-00-1 | 309-672-2 | 100684-02-4 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| to remove traces of<br>polar constituents<br>and impurities. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{16}$ through<br>$C_{32}$ .)   |              |           |             |
| Extracts (petroleum),<br>light paraffinic<br>distillate solvent, clay-<br>treated; Distillate<br>aromatic extract<br>(treated) (A complex<br>combination of<br>hydrocarbons obtained<br>as a fraction from<br>distillation of an<br>extract recovered by<br>solvent extraction of<br>light paraffinic top<br>petroleum distillates<br>treated with bleaching<br>earth to remove traces<br>of polar constituents<br>and impurities. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{16}$ through<br>$C_{32}$ .) | 649-546-00-7 | 309-673-8 | 100684-03-5 |
| Extracts (petroleum),<br>light vacuum, gas<br>oil solvent, carbon-<br>treated; Distillate<br>aromatic extract<br>(treated) (A complex<br>combination of<br>hydrocarbons obtained<br>by solvent extraction<br>of light vacuum<br>petroleum gas oil<br>treated with activated<br>charcoal for the<br>removal of trace<br>polar constituents   | 649-547-00-2 | 309-674-3 | 100684-04-6 |

| Substances  | Index number | EC number | CAS number  |
|---|--------------|-----------|-------------|
| and impurities. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{13}$ through<br>$C_{30}$ .)  |              |           |             |
| Extracts (petroleum),<br>light vacuum, gas oil<br>solvent, clay-treated;<br>Distillate aromatic<br>extract (treated) (A<br>complex combination<br>of hydrocarbons<br>obtained by solvent<br>extraction of light<br>vacuum petroleum<br>gas oils treated with<br>bleaching earth for<br>the removal of trace<br>polar constituents<br>and impurities. It<br>consists predominantly<br>of aromatic<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{13}$ through<br>$C_{30}$ .) | 649-548-00-8 | 309-675-9 | 100684-05-7 |
| Foot oil (petroleum);<br>Foots oil (A complex<br>combination of<br>hydrocarbons obtained<br>as the oil fraction from<br>a solvent deoiling<br>or a wax sweating<br>process. It consists<br>predominantly of<br>branched chain<br>hydrocarbons having<br>carbon numbers<br>predominantly in the<br>range of $C_{20}$ through<br>$C_{50.}$ )  | 649-549-00-3 | 265-171-8 | 64742-67-2  |
| Foots oil (petroleum),<br>hydrotreated; Foot's<br>oil   | 649-550-00-9 | 295-394-6 | 92045-12-0  |

| Substances   | Index Number         | EC number | CAS number |
|--|----------------------|-----------|------------|
| hexamethylphosphoric<br>triamide;<br>hexamethylphosphoran                      | 015-106-00-2         | 211-653-8 | 680-31-9   |
| diethyl sulphate   | 016-027-00-6         | 200-589-6 | 64-67-5    |
| Potassium dichromate   | 024-002-00-6         | 231-906-6 | 7778-50-9  |
| Ammonium<br>dichromate   | 024-003-00-1         | 232-143-1 | 7789-09-5  |
| Sodium dichromate  | 024-004-00-7         | 234-190-3 | 10588-01-9 |
| Sodium dichromate, dihydrate   | 024-004-01-4         | 234-190-3 | 7789-12-0  |
| Chromyl dichloride;<br>chromic oxychloride                                     | 024-005-00-2         | 239-056-8 | 14977-61-8 |
| Potassium chromate   | 024-006-00-8         | 232-140-5 | 7789-00-6  |
| benzo[a]pyrene;<br>benzo[d,e,f]chrysene  | 601-032-00-3         | 200-028-5 | 50-32-8    |
| 1,2-dibromo-3-<br>chloropropane  | 602-021-00-6         | 202-479-3 | 96-12-8    |
| Ethylene oxide;<br>oxirane   | 603-023-00-X         | 200-849-9 | 75-21-8    |
| methyl<br>acrylamidomethoxyace<br>(containing $\geq 0,1\%$<br>acrylamide)      | 607-190-00-X<br>tate | 401-890-7 | 77402-03-0 |
| methyl<br>acrylamidoglycolate<br>(containing ≥ 0,1%<br>acrylamide)             | 607-210-00-7         | 403-230-3 | 77402-05-2 |
| ethyleneimine;<br>aziridine  | 613-001-00-1         | 205-793-9 | 151-56-4   |
| 1,3,5,-<br>tris(oxiranylmethyl)-1,,<br>triazine-2,4,6(1H,3H,5)<br>trione; TGIC |                      | 219-514-3 | 2451-62-9  |
| Acrylamide   | 616-003-00-0         | 201-173-7 | 79-06-1    |

# Mutagenic substances of Category 2

# Toxic for reproduction substances of Category 1

| Substances              | Index Number | EC number | CAS number |
|-------------------------|--------------|-----------|------------|
| carbon monoxide         | 006-001-00-2 | 211-128-3 | 630-08-0   |
| lead hexafluorosilicate | 009-014-00-1 | 247-278-1 | 25808-74-6 |

| Substances  | Index Number | EC number | CAS number |
|---|--------------|-----------|------------|
| lead compounds with<br>the exception of those<br>specified elsewhere in<br>this Annex   | 082-001-00-6 |           |            |
| lead alkyls   | 082-002-00-1 |           |            |
| lead azide  | 082-003-00-7 | 236-542-1 | 13424-46-9 |
| lead chromate   | 082-004-00-2 | 231-846-0 | 7758-97-6  |
| lead di(acetate)  | 082-005-00-8 | 206-104-4 | 301-04-2   |
| trilead bis<br>(orthophosphate)   | 082-006-00-3 | 231-205-5 | 7446-27-7  |
| lead acetate  | 082-007-00-9 | 215-630-3 | 1335-32-6  |
| lead (II)<br>methanesulphonate  | 082-008-00-4 | 401-750-5 | 17570-76-2 |
| C.I. Pigment Yellow<br>34; [This substance<br>is identified in<br>the Colour Index<br>by Colour Index<br>Constitution Number,<br>C.I. 77603.] | 082-009-00-X | 215-693-7 | 1344-37-2  |
| C.I. Pigment Red<br>104; [This substance<br>is identified in<br>the Colour Index<br>by Colour Index<br>Constitution Number,<br>C.I. 77605.]   | 082-010-00-5 | 235-759-9 | 12656-85-8 |
| lead hydrogen arsenate  | 082-011-00-0 | 232-064-2 | 7784-40-9  |
| 1,2-Dibromo-3-<br>chloropropane   | 602-021-00-6 | 202-479-3 | 96-12-8    |
| warfarin; 4-hydroxy-3-<br>(3-oxo-1-phenylbutyl)<br>coumarin   | 607-056-00-0 | 201-377-6 | 81-81-2    |
| lead 2,4,6-<br>trinitroresorcinoxide,<br>lead styphnate   | 609-019-00-4 | 239-290-0 | 15245-44-0 |

# Toxic for reproduction substances of Category 2

| Substances                                | Index Number | EC number | CAS number |
|---|--------------|-----------|------------|
| nickel tetracarbonyl                      | 028-001-00-1 | 236-669-2 | 13463-39-3 |
| benzo[a]pyrene; benzo<br>[d,e,f] chrysene | 601-032-00-3 | 200-028-5 | 50-32-8    |

| Substances   | Index Number | EC number | CAS number |
|--|--------------|-----------|------------|
| 2-methoxyethanol;<br>ethylene glycol<br>monomethyl ether   | 603-011-00-4 | 203-713-7 | 109-86-4   |
| 2-ethoxyethanol;<br>ethylene glycol<br>monoethyl ether   | 603-012-00-X | 203-804-1 | 110-80-5   |
| 2-methoxyethyl<br>acetate; methylglycol<br>acetate   | 607-036-00-1 | 203-772-9 | 110-49-6   |
| 2-ethoxyethyl acetate;<br>ethylglycol acetate  | 607-037-00-7 | 203-839-2 | 111-15-9   |
| 2-ethylhexyl 3,5-bis<br>(1, 1-dimethylethyl) 4-<br>hydtoxyphenyl methyl<br>thio acetate                | 607-203-00-9 | 279-452-8 | 80387-97-9 |
| bis(2-Methoxyethyl)<br>phthalate   | 607-228-00-5 | 204-212-6 | 117-82-8   |
| binapacryl (ISO);<br>2-sec-butyl-4,6-<br>dinitrophenyl-3-<br>methylcrotonate                           | 609-024-00-1 | 207-612-9 | 485-31-4   |
| dinoseb; 6-sec-butyl-2,<br>4-dinitrophenol   | 609-025-00-7 | 201-861-7 | 88-85-7    |
| salts and esters of<br>dinoseb, with the<br>exception of those<br>specified elsewhere in<br>this Annex | 609-026-00-2 |           |            |
| dinoterb; 2-<br>tert-butyl-4, 6-<br>dinitrophenol  | 609-030-00-4 | 215-813-8 | 1420-07-1  |
| salts and esters of dinoterb   | 609-031-00-X |           |            |
| nitrofen (ISO); 2,4<br>dichlorophenyl 4-<br>nitrophenyl ether  | 609-040-00-9 | 217-406-0 | 1836-75-5  |
| methyl-ONN-<br>azoxymethyl acetate;<br>methyl azoxy methyl<br>acetate                                  | 611-004-00-2 | 209-765-7 | 592-62-1   |
| ethylene thiourea;<br>imidazolidine-2-<br>thione; 2-<br>imidazoline-2-thiol                            | 613-039-00-9 | 202-506-9 | 96-45-7    |

| Substances  | Index Number | EC number | CAS number |
|---|--------------|-----------|------------|
| N, N-<br>dimethylformamide;<br>dimethyl formamide | 616-001-00-X | 200-679-5 | 68-12-2"   |

#### Note

#### Substances:

The name is the same as that used for the substances in Annex 1 to Directive 67/548/ EEC. Whenever possible dangerous substances are designated by their Einecs (European Inventory of Existing Commercial Chemical Substances) of Elincs (European List of Notified Chemical Substances) names. Other entries not listed in Einecs or Elincs are designated using an internationally recognized chemical name (eg ISO, IUPAC). An additional common name is included in some cases. **Index number:** 

The index number is the identification code given to the substance in Annex 1 of Directive 67/548/EEC. Substances are listed in the Schedule according to this index number. **EC number:** 

For each substance listed in the European Inventory of Existing Commercial Chemical Substances (Einecs) there is an identification code which starts at 200-001-8. For each new substance notified under the Directive 67/548/EEC an idenfication code has been defined and published in the European List of Notified Chemical Substances (Elincs). The code starts at 400-010-9. CAS number:

Chemical Abstracts Services (CAS) numbers have been defined for substances to help in their identification.

### SCHEDULE 2

Regulation 4(2)

## В

### "Chlorinated solvents requiring additional labelling phrase

The substances referred to in regulation 9(3B) are specified in the table below-

| Substance                 | CAS Number |  |
|---------------------------|------------|--|
| chloroform                | 67-66-3    |  |
| carbon tetrachloride      | 56-23-5    |  |
| 1,1,2trichloroethane      | 79-00-5    |  |
| 1,1,2,2-tetrachloroethane | 79-34-5    |  |
| 1,1,1,2-tetrachloroethane | 630-20-6   |  |
| pentachloroethane         | 76-01-7    |  |
| 1,1-dichloroethylene      | 75-35-4    |  |
| 1,1,1-trichlororethane    | 71-55-6"   |  |
| Note                      |            |  |

The CAS Number is the number assigned to the substance by the Chemicals Abstract Service.

### **EXPLANATORY NOTE**

(This note is not part of the Regulations)

These Regulations implement European Parliament and Council Directive 99/43/EC (O.J. No. L166, 1.7.99, p. 87), which amended for the 17th time Council Directive 76/769/EEC (O.J. No. L262, 27.9.76, p. 201) on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations.

These Regulations revoke the Dangerous Substances and Preparations (Safety) (Consolidation) (Amendment) (No. 2) Regulations 1999 (S.I. 1999/3193), and the Chemicals (Hazard Information and Packaging for Supply) (Amendment) (No. 3) Regulations 1999 (S.I. 1999/3194).

The Regulations amend two sets of principal regulations, namely the Dangerous Substances and Preparations (Safety) (Consolidation) Regulations 1994 ("the Dangerous Substances Regulations") and the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 ("the CHIP Regulations"). The Dangerous Substances Regulations prohibit the supply to the general public of the substances listed in Schedule 2 to those Regulations, or a preparation containing such a substance must be labelled with the phrase "Restricted to professional users". The lists are derived from Annex I to Directive 76/769/EC and are identical, being a list of carcinogenic and mutagenic substances and certain substances toxic for reproduction. These Regulations update the list to include the amendments made by Directive 99/43/EC.

The Regulations correct the defect in S.I. 99/3194 by re-introducing Part IIIB of Schedule 6 to the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994.

A Regulatory Impact Assessment is available, copies of which have been placed in the libraries of both Houses of Parliament. Copies are also available from the Consumer Affairs Directorate of the Department of Trade and Industry, Room 433, 1 Victoria Street, London SW1H 0ET.