SCHEDULES

SCHEDULE 1

Regulation 3

Hazardous substances and controlled quantities

PART 1

Categories of substances

Column 1 ***Hazard categories in accordance with the CLP Regulation***	*Column 2* ***Controlled quantity (tonnes)***
Section 'H' – HEALTH HAZARDS	
H1 ACUTE TOXIC Category 1, all exposure routes	5
H2 ACUTE TOXIC — Category 2, all exposure routes — Category 3, inhalation exposure route (see note 8)	50
H3 STOT SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE STOT SE Category 1	50
Section 'P' – PHYSICAL HAZARDS	
P1a EXPLOSIVES (see note 9) — Unstable explosives or — Explosives, Division 1.1, 1.2, 1.3, 1.5 or 1.6, or — Substances or mixtures having explosive properties according to method A.14 of Regulation (EC) No 440/2008 laying down test methods pursuant to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (see note 10) and do not belong to the hazard classes Organic peroxides or Self-reactive substances and mixtures	10
P1b EXPLOSIVES (see note 9) Explosives, Division 1.4 (see note 11)	50
P2 FLAMMABLE GASES Flammable gases, Category 1 or 2	10

Column 1 ***Hazard categories in accordance with the CLP Regulation***	*Column 2* ***Controlled quantity (tonnes)***
P3a FLAMMABLE AEROSOLS (see note 12(1)) 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1	150 (net)
P3b FLAMMABLE AEROSOLS (see note 12(1)) 'Flammable' aerosols Category 1 or 2, not containing flammable gases Category 1 or 2 nor flammable liquids category 1 (see note 12(2))	5,000 (net)
P4 OXIDISING GASES Oxidising gases, Category 1	50
P5a FLAMMABLE LIQUIDS — Flammable liquids, Category 1, or — Flammable liquids Category 2 or 3 maintained at a temperature above their boiling point, or — Other liquids with a flash point ≤ 60 °C, maintained at a temperature above their boiling point (see note 13)	10
P5b FLAMMABLE LIQUIDS — Flammable liquids Category 2 or 3 where particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, or — Other liquids with a flash point ≤ 60 °C where particular processing conditions, such as high pressure or high temperature, may create major-accident hazards (see note 13)	50
P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b	5,000
P6a SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES Self-reactive substances and mixtures, Type A or B or organic peroxides, Type A or B	10
P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES Self-reactive substances and mixtures, Type C, D, E or F or organic peroxides, Type C, D, E, or F	50
P7 PYROPHORIC LIQUIDS AND SOLIDS Pyrophoric liquids, Category 1	50

Column 1 ***Hazard categories in accordance with the CLP Regulation***	*Column 2* ***Controlled quantity (tonnes)***
Pyrophoric solids, Category 1	
P8 OXIDISING LIQUIDS AND SOLIDS Oxidising Liquids, Category 1, 2 or 3, or Oxidising Solids, Category 1, 2 or 3	50
Section 'E' – ENVIRONMENTAL HAZARDS	
E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1	100
E2 Hazardous to the Aquatic Environment in Category Chronic 2	200
Section 'O' – OTHER HAZARDS	
O1 Substances or mixtures with hazard statement EUH014	100
O2 Substances and mixtures which in contact with water emit flammable gases, Category 1	100
O3 Substances or mixtures with hazard statement EUH029	50

PART 2

Named hazardous substances

Column 1 **Hazardous substances**	*CAS number*[(1)]	*Column 2* **Controlled quantity (tonnes)**
1. Ammonium nitrate (see note 14)		5,000
2. Ammonium nitrate (see note 15)		1,250
3. Ammonium nitrate (see note 16)		350
4. Ammonium nitrate (see note 17)		10
5. Potassium nitrate (see note 18)		5,000
6. Potassium nitrate (see note 19)		1,250
7. Arsenic pentoxide, arsenic (V) acid and/or salts	1303-28-2	1
8. Arsenic trioxide, arsenious (III) acid and/or salts	1327-53-3	0.1
9. Bromine	7726-95-6	20
10. Chlorine	7782-50-5	10

(1) The CAS number is shown only for indication

Column 1 **Hazardous substances**	*CAS number*[(1)]	*Column 2* **Controlled quantity (tonnes)**
11. Nickel compounds in inhalable powder form: nickel monoxide, nickel dioxide, nickel sulphide, trinickel disulphide, dinickel trioxide		1
12. Ethyleneimine	151-56-4	10
13. Fluorine	7782-41-4	10
14. Formaldehyde (concentration ≥ 90%)	50-00-0	5
15. Hydrogen	1333-74-0	2*
16. Hydrogen chloride (liquefied gas)	7647-01-0	25
17. Lead alkyls		5
18. Liquefied flammable gases, Category 1 or 2 (including LPG) and natural gas (see note 20)		Natural gas (including liquefied natural gas): 15* Liquefied petroleum gas: 25 Any other liquefied flammable gases: 50
19. Acetylene	74-86-2	5
20. Ethylene oxide	75-21-8	5
21. Propylene oxide	75-56-9	5
22. Methanol	67-56-1	500
23. 4, 4′-Methylene bis (2-chloraniline) and/or salts, in powder form	101-14-4	0.01
24. Methylisocyanate	624-83-9	0.15
25. Oxygen	7782-44-7	200
26. 2,4 -Toluene diisocyanate 2,6 -Toluene diisocyanate	584-84-9 91-08-7	10
27. Carbonyl dichloride (phosgene)	75-44-5	0.3
28. Arsine (arsenic trihydride)	7784-42-1	0.2
29. Phosphine (phosphorus trihydride)	7803-51-2	0.2
30. Sulphur dichloride	10545-99-0	1
31. Sulphur trioxide	7446-11-9	15
32. Polychlorodibenzofurans and polychlorodibenzodioxins (including TCDD), calculated in TCDD equivalent (see note 21)		0.001

(1) The CAS number is shown only for indication

Column 1 **Hazardous substances**	*CAS number*[(1)]	*Column 2* **Controlled quantity (tonnes)**
33. The following CARCINOGENS or the mixtures containing the following carcinogens at concentrations above 5% by weight: 4-Aminobiphenyl and/or its salts, Benzotrichloride, Benzidine and/or salts, Bis (chloromethyl) ether, Chloromethyl methyl ether, 1,2-Dibromoethane, Diethyl sulphate, Dimethyl sulphate, Dimethylcarbamoyl chloride, 1,2-Dibromo-3-chloropropane, 1,2-Dimethylhydrazine, Dimethylnitrosamine, Hexamethylphosphoric triamide, Hydrazine, 2- Naphthylamine and/or salts, 4-Nitrodiphenyl, and 1,3 Propanesultone		0.5
34. Petroleum products and alternative fuels (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams) (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)		2,500
35. Anhydrous ammonia	7664-41-7	50
36. Boron trifluoride	7637-07-2	5
37. Hydrogen sulphide	7783-06-4	5
38. Piperidine	110-89-4	50
39. Bis(2-dimethylaminoethyl) (methyl)amin	3030-47-5	50
40. 3-(2-Ethylhexyloxy)propylamin	5397-31-9	50
41. Mixtures (*) of sodium hypochlorite classified as Aquatic Acute Category 1 [H400] containing less than 5 % active chlorine and not classified under any of the other hazard categories in Part 1 of this Schedule provided that the mixture in the absence of sodium hypochlorite would not be classified as Aquatic Acute Category 1 [H400].		200
42. Propylamine (see note 22)	107-10-8	500
43. Tert-butyl acrylate (see note 22)	1663-39-4	200

(1) The CAS number is shown only for indication

Column 1 **Hazardous substances**	*CAS number*[(1)]	*Column 2* **Controlled quantity (tonnes)**
44. 2-Methyl-3-butenenitrile (see note 22)	16529-56-9	500
45. Tetrahydro-3,5-dimethyl-1,3,5,-thiadiazine-2-thione (Dazomet) (see note 22)	533-74-4	100
46. Methyl acrylate (see note 22)	96-33-3	500
47. 3-Methylpyridine (see note 22)	108-99-6	500
48. 1-Bromo-3-chloropropane (see note 22)	109-70-6	500

(1) The CAS number is shown only for indication

PART 3

Substances used in processes

Column 1 ***Hazardous substances***	*Column 2* ***Controlled quantity***
Where it is reasonable to foresee that a substance falling within Part 1 or Part 2 ("HS") may be generated during loss of control of the processes, including storage activities in any installation within an establishment, any substance which is used in that process ("S").	The amount of S which it is believed may generate (on its own or in combination with other substances used in the relevant process) an amount equal to or exceeding the controlled quantity of the HS in question.

PART 4

Notes to Parts 1 to 3

1. Substances and mixtures are classified in accordance with the CLP Regulation.

2. Mixtures shall be treated in the same way as pure substances provided they remain within concentration limits set according to their properties under the CLP Regulation, or its latest adaptation to technical progress, unless a percentage composition or other description is specifically given.

3. Expressions appearing both in this Schedule and in the Directive have the same meaning for the purposes of this Schedule as they have for the purposes of the Directive.

4. The controlled quantities set out in Parts 1 to 3 of this Schedule relate to each establishment.

The quantities to be considered for the application of these Regulations are the maximum quantities which are present or are likely to be present at any one time.

5. The following rule governing the addition of hazardous substances, or categories of hazardous substances, applies where appropriate.

In the case of an establishment where no individual hazardous substance is present in a quantity above or equal to the relevant controlled quantity, the following rule must be applied to determine whether the establishment is covered by the relevant requirements of these Regulations.

These Regulations apply to establishments if the sum

$q_1/Q_{L1} + q_2/Q_{L2} + q_3/Q_{L3} + q_4/Q_{L4} + q_5/Q_{L5} + \ldots$ is greater than or equal to 1,

where

q_x = the quantity of hazardous substance x (or category of hazardous substances) falling within Part 1 or Part 2 of this Schedule; and

Q_{LX} = the relevant controlled quantity for hazardous substance x (or category of hazardous substances x) from Column 2 of Part 1 or from Column 2 of Part 2 of this Schedule (except for those substances for which column 2 contains a quantity Q*, in which case, for Hydrogen, Q is equal to 5, and for Natural Gas (including liquefied natural gas), Q is equal to 50).

This rule must be used to assess the health hazards, physical hazards and environmental hazards. It must therefore be applied three times—

(a) for the addition of hazardous substances listed in Part 2 that fall within acute toxicity category 1, 2 or 3 (inhalation route) or STOT SE category 1, together with hazardous substances falling within section H, entries H1 to H3 of Part 1;

(b) for the addition of hazardous substances listed in Part 2 that are explosives, flammable gases, flammable aerosols, oxidising gases, flammable liquids, self-reactive substances and mixtures, organic peroxides, pyrophoric liquids and solids, oxidising liquids and solids, together with hazardous substances falling within section P, entries P1 to P8 of Part 1;

(c) for the addition of hazardous substances listed in Part 2 that fall within hazardous to the aquatic environment acute category 1, chronic category 1 or chronic category 2, together with hazardous substances falling within section E, entries E1 and E2 of Part 1.

The relevant provisions of these Regulations apply where any of the sums obtained by (a), (b) or (c) is greater than or equal to 1.

6. In the case of hazardous substances which are not covered by the CLP Regulation, including waste, but which nevertheless are present, or are likely to be present, in an establishment and which possess or are likely to possess, under the conditions found at the establishment, equivalent properties in terms of major accident potential, these must be provisionally assigned to the most analogous category or named hazardous substance falling within the scope of these Regulations.

7. In the case of hazardous substances with properties giving rise to more than one classification, for the purposes of these Regulations the lowest controlled quantities apply. However, for the application of the rule in note 5, the lowest controlled quantity for each group of categories in notes 5(a), 5(b) and 5(c) corresponding to the classification concerned must be used.

8. Hazardous substances that fall within Acute Toxic Category 3 via the oral route (H 301) fall under entry H2 ACUTE TOXIC in those cases where neither acute inhalation toxicity classification nor acute dermal toxicity classification can be derived, for example due to lack of conclusive inhalation and dermal toxicity data.

9. The hazard class Explosives includes explosive articles (see Section 2.1 of Annex I to the CLP Regulation). If the quantity of the explosive substance or mixture contained in the article is known, that quantity must be considered for the purposes of these Regulations. If the quantity of the explosive substance or mixture contained in the article is not known, then, for the purposes of these Regulations, the whole article must be treated as explosive.

10. Testing for explosive properties of substances and mixtures is only necessary if the screening procedure according to Appendix 6, Part 3 of the UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria (UN Manual of Tests and Criteria)(**1**) identifies the substance or mixture as potentially having explosive properties.

11. If Explosives of Division 1.4 are unpacked or repacked, they shall be assigned to the entry P1a, unless the hazard is shown to still correspond to Division 1.4, in accordance with the CLP Regulation.

12.—(1) Flammable aerosols are classified in accordance with the Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers(**2**)(Aerosol Dispensers Directive). "Extremely flammable" and "Flammable" aerosols of Directive 75/324/EEC correspond to Flammable Aerosols Category 1 or 2 respectively of the CLP Regulation.

(2) In order to use this entry, it must be documented that the aerosol dispenser does not contain Flammable Gas Category 1 or 2 nor Flammable Liquid Category 1.

13. According to paragraph 2.6.4.5 in Annex I to the CLP Regulation, liquids with a flash point of more than 35 °C need not be classified in Category 3 if negative results have been obtained in the sustained combustibility test L.2, Part III, section 32 of the UN Manual of Tests and Criteria. This is however not valid under elevated conditions such as high temperature or pressure, and therefore such liquids are included in this entry.

14. Ammonium nitrate (5,000/10,000): fertilisers capable of self-sustaining decomposition

This applies to ammonium nitrate-based compound/composite fertilisers (compound/composite fertilisers contain ammonium nitrate with phosphate and/or potash) which are capable of self-sustaining decomposition according to the UN Trough Test (see UN Manual of Tests and Criteria, Part III, subsection 38.2), and in which the nitrogen content as a result of ammonium nitrate is—

(a) between 15.75%(**3**) and 24.5%(**4**) by weight, and either with not more than 0.4% total combustible/organic materials or which fulfil the requirements of Annex III-2 to Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers(**5**);

(b) 15.75% by weight or less and unrestricted combustible materials.

15. Ammonium nitrate (1,250/5,000): fertiliser grade

This applies to straight ammonium nitrate-based fertilisers and to ammonium nitrate-based compound/composite fertilisers which fulfil the requirements of Annex III-2 to Regulation (EC) No 2003/2003 and in which the nitrogen content as a result of ammonium nitrate is—

(a) more than 24.5% by weight, except for mixtures of straight ammonium nitrate based fertilisers with dolomite, limestone and/or calcium carbonate with a purity of at least 90%;

(b) more than 15.75% by weight for mixtures of ammonium nitrate and ammonium sulphate;

(c) more than 28%(**6**) by weight for mixtures of straight ammonium nitrate-based fertilisers with dolomite, limestone and/or calcium carbonate with a purity of at least 90%.

(**1**) More guidance on waiving of the test can be found in the A.14 method description in the Annex to Council Regulation (EC) No 440/2008 of 30 May 2008 laying down test methods pursuant to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration Evaluation, Authorisation and Restriction of Chemicals (REACH) (O.J. L 142, 31.5.2008, p. 1).
(**2**) O.J. L 147, 9.6.1975, p. 40.
(**3**) 15.75% nitrogen content by weight as a result of ammonium nitrate corresponds to 45% ammonium nitrate.
(**4**) 24.5% nitrogen content by weight as a result of ammonium nitrate corresponds to 70% ammonium nitrate.
(**5**) O.J. L 304, 21.11.2003, p. 1.
(**6**) 28% nitrogen content by weight as a result of ammonium nitrate corresponds to 80% ammonium nitrate.

16. Ammonium nitrate (350/2,500): technical grade

This applies to ammonium nitrate and mixtures of ammonium nitrate in which the nitrogen content as a result of the ammonium nitrate is—

(a) between 24.5% and 28% by weight, and which contain not more than 0.4% combustible substances;

(b) more than 28% by weight, and which contain not more than 0.2% combustible substances.

It also applies to aqueous ammonium nitrate solutions in which the concentration of ammonium nitrate is more than 80% by weight.

17. Ammonium nitrate (10/50): 'off-specs' material and fertilisers not fulfilling the detonation test.

This applies to—

(a) material rejected during the manufacturing process and to ammonium nitrate and mixtures of ammonium nitrate, straight ammonium nitrate-based fertilisers and ammonium nitrate-based compound/composite fertilisers referred to in notes 14 and 15, that are being or have been returned from the final user to a manufacturer, temporary storage or reprocessing plant for reworking, recycling or treatment for safe use, because they no longer comply with the specifications of notes 14 and 15;

(b) fertilisers referred to in note 13(a), and note 14(a) to this Schedule which do not fulfil the requirements of Annex III-2 to Regulation (EC) No 2003/2003.

18. Potassium nitrate (5,000/10,000)

This applies to those composite potassium-nitrate based fertilisers (in prilled/granular form) which have the same hazardous properties as pure potassium nitrate.

19. Potassium nitrate (1,250/5,000)

This applies to those composite potassium-nitrate based fertilisers (in crystalline form) which have the same hazardous properties as pure potassium nitrate.

20. Upgraded biogas

For the purpose of the implementation of these Regulations, upgraded biogas may be classified under entry 18 of Part 2 of this Schedule where it has been processed in accordance with applicable standards for purified and upgraded biogas ensuring a quality equivalent to that of natural gas, including the content of Methane, and which has a maximum of 1% Oxygen.

21. Polychlorodibenzofurans and polychlorodibenzodioxins

The quantities of polychlorodibenzofurans and polychlorodibenzodioxins are calculated using the following factors:

WHO 2005 TEF[(1)]			
2,3,7,8-TCDD	1	2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDD	1	2,3,4,7,8-PeCDF	0.3
		1,2,3,7,8-PeCDF	0.03
1,2,3,4,7,8-HxCDD	0.1		

(1) Van den Berg et al: The 2005 World Health Organisation Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds

1,2,3,6,7,8-HxCDD	0.1	1,2,3,4,7,8-HxCDF	0.1
1,2,3,7,8,9-HxCDD	0.1	1,2,3,7,8,9-HxCDF	0.1
		1,2,3,6,7,8-HxCDF	0.1
1,2,3,4,6,7,8-HpCDD	0.01	2,3,4,6,7,8-HxCDF	0.1
OCDD	0.0003	1,2,3,4,6,7,8-HpCDF	0.01
		1,2,3,4,7,8,9-HpCDF	0.01
		OCDF	0.0003
(T = tetra, P = penta, Hx = hexa, Hp = hepta, O = octa)			

(1) Van den Berg et al: The 2005 World Health Organisation Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds

22. In cases where this hazardous substance falls within category P5a Flammable liquids or P5b Flammable liquids, then for the purposes of these Regulations the lower controlled quantity applies.

23. Where a hazardous substance falls within both Parts 1 and 2 of this Schedule, the controlled quantity in Part 2 applies.

24. In relation to Part 3—

(a) where S also falls within Part 1 or Part 2, the classification with the lowest controlled quantity applies; and

(b) where S also falls within Part 1 and Part 2, the controlled quantity which is lowest when the controlled quantities under Part 2 and Part 3 are compared applies.