## **COMMISSION DIRECTIVE 2000/71/EC**

### of 7 November 2000

to adapt the measuring methods as laid down in Annexes I, II, III and IV to Directive 98/70/EC of the European Parliament and of the Council to technical progress as foreseen in Article 10 of that Directive

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EC (¹), and in particular Article 10 thereof,

#### Whereas:

- (1) Directive 98/70/EC establishes environmental specifications for unleaded petrol and diesel fuels. Annex I to IV to that Directive include the test methods and their dates of publication which shall be used to determine quality of petrol and diesel fuels in relation to these environmental specifications.
- (2) European Standard 228 and European Standard 590 also establish quality specifications for petrol and diesel respectively to ensure the proper functioning of these products. These standards have recently updated and adopted by European Committee for Standardisation on 29 October 1999 and the test methods for some quality parameters which also are included as environmental specifictions in Annex I to IV of Directive 98/70/EC have been updated or changed to reflect technical progress. The test methods in Annex I to IV should be consistent with those in European Standards 228 and 590 to facilitate the implementation of the directive and to ensure that its updated to reflect technical progress.
- (3) The measures provided for in this Directive are in accordance with the opinion of the Article 10 Committee established to, *inter alia*, assist the Commission to adapt Directive 98/70/EC to technical progress,

HAS ADOPTED THIS DIRECTIVE:

#### Article 1

Annex I to IV to Directive 98/70/EC are replaced by Annex I to IV to this Directive.

#### Article 2

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 1 January 2001 at the latest. They shall forthwith inform the Commission thereof.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the texts of the main provisions of domestic law which they adopt in the field covered by this Directive.

#### Article 3

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Communities.

### Article 4

This Directive is addressed to the Member States.

Done at Brussels, 7 November 2000.

For the Commission

Margot WALLSTRÖM

Member of the Commission

#### ANNEX I

#### ENVIRONMENTAL SPECIFICATIONS FOR MARKET FULES TO BE USED FOR VEHICLES EQUIPPED WITH POSITIVE-IGNITION ENGINES

#### Type: Petrol

Parameter	Unit	Limits (¹)		Test	
		Minimum	Maximum	Method	Date of publication
Research octane number		95	_	EN 25164	1993
Motor octane number		85	_	EN 25163	1993
Vapour pressure, summer period (2)	kPa	_	60,0	pr. EN-13016-1 (DVPE)	1997
Distillation:  — evaporated at 100 °C  — evaporated at 150 °C	% v/v % v/v	46,0 75,0		pr. EN-ISO 3405	1998
Hydrocarbon analysis:  — olefins (³) (⁴) (⁵)  — aromatics (³) (⁴) (⁵)  — benzene (⁻)	% v/v	_ _ _ _	18,0 (6) 42,0 1,0	ASTM D1319 ASTM D1319 EN 12177 EN 238	1995 1995 1998 1996
Oxygen content (8)	% m/m	_	2,7	EN 1601 pr. EN 13132	1997 1998
Oxygenates (9)				EN 1601 pr. EN 13132	1997 1998
<ul> <li>Methanol, stabilising agents must be added</li> </ul>	% v/v	_	3		
<ul> <li>Ethanol, stabilising agents may be necessary</li> </ul>	% v/v	_	5		
— Iso-propyl alcohol	% v/v	_	10		
— Tert-butyl alcohol	% v/v	_	7		
<ul><li>— Iso-butyl alcohol</li></ul>	% v/v	_	10		
<ul> <li>Ehters containing 5 or more carbon atoms per molecule</li> </ul>	% v/v	_	15		
Other oxygenates (9)	% v/v	_	10		
Sulphur content (10)	mg/kg	_	150	EN ISO 14596 EN ISO 8754 EN 24260	1998 1995 1994
Lead content	g/l	_	0,005	EN 237	1996

- (1) The values quoted in the specification are 'true values'. In the establishment of their limit values the term of ISO 4259 'Petroleum products Determination and application of precision data in relation to methods of test, have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account (R = reproducibility). The results of individual measurements shall be interpreted on the basis of the criteria described in ISO 4259 (published in 1995).
- (2) The summer period shall begin no later than 1 May and shall not end before 30 September. For Member States with arctic conditions the summer period shall begin no later than 1 June and note end before 31 August and the RVP is limited to 70 kPa.
- The content of oxygenate compounds shall be determined in order to make the corrections according to clause 13.2 of ASTM D
- When Ethyl-tert-butyl ether (ETBE) is present in the sample, the aromatic zone shall be determined from the pink brown ring downstream of the red ring normally used in the absence of ETBE. The presence or absence of ETBE can be concluded from the analysis described in note 3.
- (3) For the purpose of this standard ASTM D 1319:1995 shall be applied without the optional depentanisation step. Therefore clauses 6.1. 10.1 and 14.1.1 shall not be applied.
- (9) Except for unleaded petrol regular (minimum motor octane number (MON) of 81 and a minimum research octane number (RON) of 91) for which the maximum olefin content shall be 21 % v/v. These limits shall not preclude the introduction on to the market of a Member State of another unleaded petrol with lower octane numbers than set out in this Annex.
- (7) In cases of dispute, EN 12177:1998 shall be used.
- (8) In cases of dispute, EN 1601:1997 shall be used.
- Other mono-alcohols with a final distillation point no higher than the final distillation point laid down in national specifications or, where these do not exist, in industrial specifications for motor fuels.
  (10) In cases of dispute EN ISO 14596:1998 shall be used.

#### ANNEX II

# ENVIRONMENTAL SPECIFICATIONS FOR MARKET FUELS TO BE USED FOR VEHICLES EQUIPPED WITH COMPRESSION IGNITION ENGINES

Type: Diesel fuel

Parameter	Unit	Limits (¹)		Test	
		Minimum	Maximum	Method	Date of publication
Cetane number		51,0	_	EN ISO 5165	1998
Density at 15 °C (2)	kg/m³	_	845	EN ISO 3675	1998
				EN ISO 12185	1996
Distillation:					
— 95 % point	°C	_	360	pr. EN ISO 3405	1998
Polycyclic aromatic hydrocarbons (3)	% m/m	_	11	IP 391	1995
Sulphur content (4)	mg/kg	_	350	EN ISO 14596	1998
				EN ISO 8754	1995
				EN 24260	1994

<sup>(1)</sup> The values quoted in the specification are 'true values'. In the establisment of their limit values the terms of ISO 4259 'Petroleum roducts — Determination and application of precision data in relation to methods of test', have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been been taken into account (R = reproducibility). The results of individual measurements shall be interpreted on the basis of the criteria described in ISO 4259 (published in 1995).

(2) In cases of dispute EN ISO 3675:1998 shall be used.

<sup>(2)</sup> Polycyclic aromatic hydrocarbons are defined as the total aromatic hydrocarbon content less the mono-aromatic hydrocarbon content both as determined by IP 391.
(4) In cases of dispute EN ISO 14596:1998 shall be used.

#### ANNEX III

# ENVIRONMENTAL SPECIFICATIONS FOR MARKET FUELS TO BE USED FOR VEHICLES EQUIPPED WITH POSITIVE IGNITION ENGINES

Type: Petrol

Parameter	Unit	Limits (1)		Test	
		Minimum	Maximum	Method	Date of publication
Research octane number		95		EN 25164	1993
Motor octane number		85		EN 25163	1993
Vapour pressure, summer period	kPa	_		pr. EN 13016-1 (DVPE)	1997
Distillation:	% v/v			pr. EN ISO 3405	1988
— evaporated at 100 °C		_	_		
— evaporated at 150 °C		_	_		
Hydrocarbon analysis:					
— olefins (2) (3) (4)	% v/v	_		ASTM D1319	1995
— aromátic (²) (³) (4)	% v/v	_	35,0	ASTM D1319	1995
— benzene (5)	% v/v	_		EN 12177	1995
				EN 238	1996
Oxygen content (6)	% m/m	_		EN 1601	1997
				pr. EN 13132	1998
Sulphur content (7)	mg/Kg	_	50	pr. EN ISO/14596	1998
•	0, 0			EN ISO 8754	1995
				EN 24260	1994
Lead content	g/l	_		EN 237	1996

<sup>(1)</sup> The values quoted in the specification are 'true values'. In the establishment of their limit values the terms of ISO 4259 'Petroleum products — Determination and application of precision data in relation to methods of test', have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account (R = reproducibility). The results of individual measurements shall be interpreted on the basis of the criteria described in ISO 4259 (published in 1995).

<sup>(2)</sup> The content of oxygenate compounds shall be determined in order to make the corrections according to clause 13.2 of ASTM D 1319:1995.

<sup>(3)</sup> When Ethyl-tert-butyl ether (ETBE), is present in the sample, the aromatic zone shall be determined from the pink brown ring downstream of the red ring normally used in the absence of ETBE. The presence or absence of ETBE can be concluded from the analysis described in note 2.

<sup>(4)</sup> For the purpose of this standard ASTM D 1319: 1995 shall be applied without the optional depentanisation step. Therefore clauses 6.1, 10.1 and 14.1 shall not be applied.

(5) In cases of dispute, EN 12177:1998 shall be used.

(6) In cases of dispute, EN 1601:1997 shall be used.

<sup>(7)</sup> In cases of dispute, EN ISO 14596:1998 shall be used.

#### ANNEX IV

# ENVIRONMENTAL SPECIFICATIONS FOR MARKET FUELS TO BE USED FOR VEHICLES EQUIPPED WITH COMPRESSION IGNITION ENGINES

Type: Diesel fuel

Parameter	Unit	Limits (1)		Test	
		Minimum	Maximum	Method	Date of publication
Cetane number			_	EN ISO 5165	1998
Density at 15 °C (2)	kg/m³		_	EN ISO 3675	1998
				EN ISO 12185	1996
Distillation:					
— 95 % point	°C	_		pr. EN ISO 3405	1998
Polycyclic aromatic hydrocarbons (3)	% m/m	_		IP 391	1995
Sulphur content (4)	mg/kg	_	50	EN ISO 14596	1998
				EN ISO 8754	1995
				EN 24260	1994

<sup>(1)</sup> The values quoted in the specification are 'true values'. In the establishment of their limit values the terms of ISO 4259 'Petroleum products — Determination and application of precision data in relation to methods of test, have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account (R = reproducibility). The results of individual measurements shall be interpreted on the basis of the criteria described in ISO 4259 (published in 1995).

<sup>(2)</sup> In cases of dispute EN ISO 3675:1998 shall be used.

<sup>(2)</sup> Polycyclic aromatic hydrocarbons are defined as the total aromatic hydrocarbon content less the mono-aromatic hydrocarbon content both as determined by IP 391.
(4) In cases of dispute EN ISO 14596:1998 shall be used.