

From The Ministry of Environment and Forestry:

**Regulation relating to the Quality of Petrol and Diesel Fuels  
(2003/17/EC and amending 98/70/EC)**

SECTION ONE

Purpose, Scope, Support and Definitions

**Purpose**

**Article 1** – The purpose of this Regulation is to determine the methods and principles related to the application and the technical specifications of the petrol and diesel fuel to be used in the vehicles with the scope of protecting the environment and human health.

**Scope**

**Article 2** – This Regulation comprises the technical specifications of the fuels which will be used in the vehicles equipped with compression ignition engines (which work with petrol and diesel fuel) and the ones with positive ignition in sense of protecting the environment and human health.

**Support**

**Article 3** - This regulation has been arranged relying upon the environment Law no 2872, Preparation and Application of the Technical Legislation concerning the Products no 4703 and Petrol Market Law no 5015.

**Definitions**

**Article 4** – For the purposes of this Regulation:

“Ministry” means the Ministry of Environment and Forestry

“EPDK (EMRA)” means Energy Market Regulatory Authority

“AT (EC)” means the European Community.

“Petrol” means any volatile mineral oil intended for the operation of internal combustion positive-ignition engines for the propulsion of vehicles and falling within CN codes 2710 11 41 00 00, 2710 11 45 00 00, 2710 11 49 00 00, 2710 11 51 00 00, and 2710 11 59 00 00.

“Diesel Fuels” means gas oils falling within CN code 2710 19 41 00 11 and used for self-propelling vehicles as referred to in Directive 70/220/EC and 88/77/EC.

“Gas oils intended for use by non-road mobile machinery and agricultural and forestry tractors” means any petroleum-derived liquid, falling within CN codes 2710 19 41 00 19 and 2710 19 45 00 11, intended for use in engines referred to in Directives 97/68/EC and 200/25/EC.

SECTION TWO

Application Principles

**Application**

**Article 5** – The application for the petrol and diesel fuel to be used in the vehicles within the scope of this Regulation is as follows:

a) Petrol

1) The unleaded petrol may be available and marketed if it complies with the environmental specifications set out in ANNEX-I, following the publication of this Regulation.

2) By no later than 1 January 2007 the unleaded petrol will be available and marketed only if it complies with the environmental specification set out in ANNEX- III, except for the sulfur content which shall be a maximum of 50 mg/kg.

3) By no later than 1 January 2007 petrol may be available and marketed if it complies with the environmental specification set out in ANNEX- III, except for the sulfur content which shall be a maximum of 10 mg/kg.

4) By no later than 1 January 2009 petrol will be available and marketed only if it complies with the environmental specification set out in ANNEX- III, except for the sulfur content which shall be a maximum of 50 mg/kg.

5) The marketing of small quantities of leaded petrol, a maximum of 0,5 % of total sales to be used by old vehicles of a characteristic value and to be distributed through special interest group may continue to permit.

#### b) Diesel Fuel

1) The diesel fuel may be available and marketed if it complies with the environmental specifications set out in ANNEX-I, following the publication of this Regulation.

2) By no later than 1 January 2007 diesel fuel will be available and marketed only if it complies with the environmental specification set out in ANNEX- IV, except for the sulfur content which shall be a maximum of 50 mg/kg.

3) By no later than 1 January 2007 diesel fuel may be available and marketed if it complies with the environmental specification set out in ANNEX- IV, except for the sulfur content which shall be a maximum of 10 mg/kg.

4) By no later than 1 January 2009 diesel fuel will be available and marketed only if it complies with the environmental specification set out in ANNEX- IV, except for the sulfur content which shall be a maximum of 10 mg/kg.

5) Gas oils intended for use by non-road mobile machinery and agricultural and forestry tractors shall contain sulfur set out in this Regulation or less than 2000 mg/kg. The permissible content is stipulated in Directive 93/12/EC.

6) The maximum permissible sulfur content of gas oils intended for use by non-road mobile machinery and agricultural and forestry tractors shall be 2000 mg/kg. By 1 January 2008 the maximum permissible sulfur content of gas oils to be used in the non-road mobile machinery and agricultural and forestry tractors shall be 1000 mg/kg.

#### **Market Observation and Supervision**

**Article 6** – The market observation and supervision for the quality of gas oils, will be executed by the Ministry of Industry and Trade, in conformity with the provisions set out in Directive relating to the Market Observation and Inspection of Products, entered into force by the decree of the Committee of Ministers dated 13/11/2001 and numbered 2001/3529; and with Law no 4703, relating to the Preparation and Application of the Technical Legislation of Products.

SECTION THREE  
Miscellaneous and Final Provisions

**Monitoring Compliance and Reporting**

**Article 7** – On the basis of the analytical methods referred to in TS EN 228 and TS 3082 EN 590, EMRA shall be liable for monitoring compliance with the requirements of Article 5.

**Notification**

**Article 8** – EC Commission will be informed about this Regulation, prepared by relying upon of European Community Directives 2003/17/EC and amended 98/70/EC; and Compliance Monitoring Report to be established due to this Regulation.

**Temporary Article 1** – By January 2005, referred to in TS 2885 standards the maximum amount of sulfur in leaded super petrol cannot exceed 0,15 gr/l.

**Temporary Article 2** – By 1 January 2006, leaded petrol is prohibited to be available and marketed in the territory unless it complies with the provisions set out in sub-clause 5, Clause (a) of Article 5.

**Temporary Article 3** – Until January 2007, unleaded petrol is permitted to be available and marketed in the territory in condition that it complies with the provisions set out in TS EN 228.

**Temporary Article 4** – By the date of publication of the present Regulation, the marketing of leaded petrol

- a) To be used in the old vehicles (equipped with soft valve ) until 1 January 2006, due to the properties referred to in TS 2885,
- b) By 1 January 2006, referred to in TS EN 228,
- c) By 1 January 2007, referred to in ANNEX –I of this Regulation,
- d) By 1 January 2009, referred to in ANNEX – III of this Regulation,

which to comply with the environmental qualities, have minimum 8 mg/kg and maximum 20 mg/kg Potassium or to have minimum 10 mg/kg and maximum 50 mg/kg Manganese instead of lead, as additive substance.

**Temporary Article 5** – Until 1 January 2007 diesel fuel will be available and marketed in the territory only if it complies with the environmental provisions referred to in TS 3082 EN 590.

**Enforcement**

**Article 9** – This Regulation shall enter into force on the day of its publication in the Official Journal.

**Execution**

**Article 10** – The provisions of this Regulation is executed by the Minister of Environment and Forestry.

**ANNEX I**  
**ENVIRONMENTAL SPECIFICATIONS FOR MARKET FUELS TO BE USED FOR VEHICLES EQUIPPED**  
**WITH POSITIVE IGNITION ENGINES**

Type: Petrol

Parameter <sup>(1)</sup>	Unit	Limits <sup>(2)</sup>	
		Minimum	Maximum
Research Octane Number, RON		95 <sup>(3)</sup>	-
Motor Octane Number, MON		85	-
Vapor Pressure, summer period <sup>(4)</sup>	kPa	-	60,0 <sup>(5)</sup>
<b>Distillation:</b>			
- Percentage evaporated at 100° C	% v/v	46,0	-
- Percentage evaporated at 150° C	% v/v	75,0	-
<b>Hydrocarbon Analysis:</b>			
- olefins	% v/v	-	18,0 <sup>(6)</sup>
- aromatics	% v/v	-	42,0
- benzene	% v/v	-	1,0
Oxygen content	% m/m	-	2,7
<b>Oxygenates</b>			
- Methanol (stabilizing agents must be added)	% v/v	-	3
- Ethanol ( stabilizing agents may be necessary)	% v/v	-	5
- Isopropyl alcohol	% v/v	-	10
- Tert-butyl alcohol	% v/v	-	7
- Iso- butyl alcohol	% v/v	-	10
- Ethers (containing 5 or more carbon atoms per molecule)	% v/v	-	10
Other Oxygenates <sup>(7)</sup>	% v/v	-	15
Sulfur content	mg/kg	-	10
Lead content	g/l	-	150
		-	0,005
		-	

**Notes:**

1. The test methods shall be those specified in EN 228:1999. Member States may adopt the analytical method specified in replacement EN 228:1999 standard if it can be shown to give at least the same accuracy and at least the same level of precision as the analytical method it replaces.
2. 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).
3. Unleaded regular grade petrol may be marketed with a minimum motor octane number (MON) of 81 and minimum research octane number (RON) of 91.
4. The summer period shall begin no later than 1 May and shall not end before 30 September. For Member States with arctic or severe winter conditions; the summer period shall begin no later than 1 June and shall not end before 31 August.
5. For Member States with arctic or severe winter conditions the vapor pressure shall not exceed 70 kPa during summer period.
6. Unleaded regular grade petrol may be marketed with a maximum olefin content of 21%.
7. Other mono alcohols and ethers with a final boiling point no higher than that stated in EN 228:1999.

## ANNEX II

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

Type: Motorine (Diesel Fuel)

Parameter <sup>(1)</sup>	Unit	Limits <sup>(2)</sup>	
		Minimum	Maximum
Cetane Number		51,0	-
Density at 15° C	Kg/m <sup>3</sup>	-	845
Distillation: 95 % (v/v) recovered at	° C	-	360
Polycyclic Aromatic hydrocarbons	% m/m	-	11
Sulfur content	mg/kg	-	350

## Notes:

1. The test methods shall be those specified in EN 228:1999. Member States may adopt the analytical method specified in replacement EN 228:1999 standard if it can be shown to give at least the same accuracy and at least the same level of precision as the analytical method it replaces.
2. 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).

ANNEX III

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

Type: Petrol

Parameter <sup>(1)</sup>	Unit	Limits <sup>(2)</sup>	
		Minimum	Maximum
Research Octane Number, RON		95 <sup>(3)</sup>	-
Motor Octane Number, MON		85	-
Vapor Pressure, summer period <sup>(4)</sup>	kPa	-	60,0 <sup>(5)</sup>
Distillation:			
- Percentage evaporated at 100° C	% v/v	46,0	-
- Percentage evaporated at 150° C	% v/v	75,0	-
Hydrocarbon Analysis:			
- olefins	% v/v	-	18,0
- aromatics	% v/v	-	35,0
- benzene	% v/v	-	1,0
Oxygen content	% m/m	-	2,7
Oxygenates			
- Methanol (stabilizing agents must be added)	% v/v	-	3
- Ethanol ( stabilizing agents may be necessary)	% v/v	-	5
- Isopropyl alcohol	% v/v	-	10
- Tert-butyl alcohol	% v/v	-	7
- Iso- butyl alcohol	% v/v	-	10
- Ethers (containing 5 or more carbon atoms per molecule)	% v/v	-	15
Other Oxygenates <sup>(7)</sup>	% v/v	-	10
Sulfur content	mg/kg	-	50
Lead content	g/l	-	-10 <sup>(7)</sup>
		-	0,005

Notes:

- The test methods shall be those specified in EN 228:1999. Member States may adopt the analytical method specified in replacement EN 228:1999 standard if it can be shown to give at least the same accuracy and at least the same level of precision as the analytical method it replaces.
- 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).
- Marketing of unleaded regular petrol with a minimum motor octane number (MON) of 81 and a minimum research octane number (RON) of 91 may be permissible.
- The summer period shall begin no later than 1 May and shall not end before 30 September. For Member States with arctic or severe winter conditions; the summer period shall begin no later than 1 June and shall not end before 31 August.
- For Member States with arctic or severe winter conditions the vapor pressure shall not exceed 70 kPa during summer period.
- Other mono alcohols and ethers with a final boiling point no higher than that stated in EN 228:1999.
- By no later than 1 January 2007 unleaded petrol with a maximum sulfur content of 10 mg/kg shall begin to be available and marketed within the territory. By 1 January 2009, all unleaded petrol marketed in the territory must have a maximum sulfur content of 10 mg/kg.

## ANNEX IV

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

Type: Diesel Fuel)

Parameter <sup>(1)</sup>	Unit	Limits <sup>(2)</sup>	
		Minimum	Maximum
Cetane Number		51,0	-
Density at 15° C	Kg/m <sup>3</sup>	-	845
Distillation: 95 % (v/v) recovered at	° C	-	360
Polycyclic Aromatic hydrocarbons	% m/m	-	11
Sulfur content	mg/kg	-	50
	mg/kg	-	10 <sup>(3)</sup>

## Notes:

1. The test methods shall be those specified in EN 228:1999. Member States may adopt the analytical method specified in replacement EN 228:1999 standard if it can be shown to give at least the same accuracy and at least the same level of precision as the analytical method it replaces.
2. 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).
3. By no later than 1 January 2007 diesel fuel with a maximum sulfur content of 10 mg/kg shall begin to be available and marketed within the territory. By 1 January 2009, all diesel fuel marketed within the territory must have a maximum sulfur content of 10 mg/kg.