

Ministerial decree No 470/93 (**TRANSLATION in English**)

Technical specifications for heating oil
Gov. Journal 496/B/7-7-93

The Ministers of Finance, Environment- Public works and Industry- Energy and Technology

Taking into account:
.....

We agree with the decision No 470/93 of the Highest Chemical Council....

Technical Chemistry of State Highest Chemical Council

We agree with the Technical Specifications for heating oil as follows:

1. Aim

The present specs cover the minimum requirements for external burning oil aimed to be used with burners of heating installations...

2. General requirements

2.1. materials

It will be a mix of hydrocarbons, clean, clear, with no water or impurities in a content percentage superior to the described in the present decision. The mentioned hydrocarbons will be extracts of oil or their burning products or a mix of both in such an analogy so they fit to the conditions of the present.

2.2. Colouring and traceability

The colouring and traceability of heating oil will be made as described in decision No 38/92 of the Highest Chemical Council.

The colour intensity will vary between ASTM No 3 and ASTM No 5. The colour limits mentioned in Decrees 1545/91 and 38/92 are abolished.

3. Detailed requirements

The Physical and Chemical detailed characteristics are given in table 1.

4. Sampling

It will be done following the methods and instructions described in the decision No 13/85 of the HCC or the standards ISO 3170 or 3171.

5. Methods of control

All the above mentioned characteristics will be defined following the methods of the table 2. The evaluation of the results will be done according to standard ISO 4259. The same procedure will be followed for solution of arguments between interested parties.

Table 1 Detailed requirements

<u>Characteristics</u>	<u>Limits</u>
Density in K/cm ³ at 15°C to be defined	
Inflammation point minimum °C	55
Flow point maximum °C (a)	
• From 1/10 to 31/3	-9
• From 1/4 to 30/9	0
Cleaning temperature of cold filter °C	
• From 1/10 to 31/3	-5
• From 1/4 to 30/9	-
Water and sediment, %.....maximum	0,10
Carbon residue, %.....maximum (b)	0,30

Ash, %.....maximum	0,02
Sulphur, %.....maximum	0,30
Viscosity at 40 °C, CT5, maximum	6
Corrosion of Copper spring, ASTM No, max. (c)	3
Ketone rate, minimum	40
Condensate at 350 °C, %minimum	85

- (a) It is permitted to keep the rate of previous period for 15 days as tolerance.
(b) Measured on 10% of extract residue.
(c) Duration: 3 hours at temperature of 50 °C.

Table 2 Methods of control

<u>Characteristics</u>	<u>Methods</u>
Density	ASTM D 1298 or ASTM D 4052 or HCC 8/84
Inflammation point	ASTM D 93
Flow point	ASTM D 97
Cleaning temperature of cold filter	EN 116
Water and sediment	ASTM B1796
Carbon residue	ISO 10370
Ash	ASTM D 482 or EN 26245
Distillation	ASTM D86
Viscosity	ASTM D 445
Sulphur	ASTM D 4294
Copper corrosion	ASTM D 130
Ketone rate	ASTM D 4737
Colour	ASTM D 1500
Furfural	Pr-EN 214

The President
G. Parisakis

The secretary
H. Pallari

The members:

From the present, there is no expense in charge of the state budget

This vigour of the decision starts from the day of the publication on the official Journal of the State.