



Esso Gas Oil

Marketing Technical Bulletin

Alternative Descriptions

Esso Tractor Diesel
 Esso Heating Oil
 CEGB Turbine Fuel
 Esso Diesel Medium
 Esso Marine Gasoil

Appearance

Clear & Bright liquid.
 Red Colour

Specification

BS EN 2869: 2006 : Class A2 & Class D
 ISO 8217:2005 Class DMA

* Contains chemical markers and dye in accordance with HM Customs & Excise requirements. The dye gives the product a red colour. During the latter part of 2002 the Euromarker was introduced.
 Carries a lower rate of duty than Diesel ULS.

Application

Used in small industrial and commercial boilers/furnaces, stationary engines, off-highway equipment, farm tractors, trains and light duty to medium speed marine applications.

Quality Data

| Parameter (BS-Methods) | Units | BS or HM Customs & Excise Limit | | Esso Typical |
|---|--------------------|------------------------------------|------|--------------|
| | | Min | Max | |
| Viscosity @40°C | | | | |
| Class A2 (Winter) | mm ² /s | 1.50 | 5.50 | 3.4 |
| Class A2 (Summer) | mm ² /s | 2.00 | 5.50 | 4.2 |
| Class D (Annually) | mm ² /s | 1.50 | 5.50 | 3.7 |
| Density @15°C | kg/m ³ | 820 | - | 859.6 |
| Cetane Number / Index | | 45 | - | 49.0 |
| Carbon residue (on 10% distillation residue) | % (m/m) | - | 0.30 | 0.03 |
| Distillation | | | | |
| % (v/v) recovered @ 250°C | % v/v | - | 65 | 22 |
| % (v/v) recovered @ 350°C | % v/v | 85 | - | 91 |
| 95% (v/v) recovered | °C | - | 385 | 359 |
| 50% (v/v) recovered | °C | 240 | 340 | 302 |
| Flash point | °C | 56 | - | 70 |
| Water content | Mg/kg | - | 200 | 80 |
| Sediment | Mg/kg | - | 24 | <1 |
| Ash Content | % (m/m) | - | 0.01 | 0.001 |
| Sulphur Content | mass % | - | 0.10 | 0.085 |
| Copper Strip Corrosion | Rating | Class 1 | | Class 1 |
| Cloud Point | | | | |
| Summer | °C | - | - | 2 |
| Winter | °C | - | - | -2 |
| CFPP | | | | |
| Summer | °C | - | -4 | - 6 |
| Winter | °C | - | -12 | -21 |
| Strong Acid Number | mgKOH/g | - | Nil | Nil |

Seasonality Dates

| Grade | Ex Terminal |
|----------------|------------------------------------|
| S Summer Grade | 16 March to 30 September inclusive |
| W Winter Grade | 1 October to 15 March inclusive |

Additional Technical Information

| | Units | Esso Gasoil |
|-----------------------------|----------|-------------|
| Specific Energy | Gross | MJ/kg 45.62 |
| | Net | MJ/kg 42.86 |
| Mean Specific Heat Capacity | KJ/kg °C | 2.002 |
| (Between 0 °C & 100 °C) | | |
| Volume Correction Factor | Per °C | 0.00080 |

Specific Energy calculated using BS2869

Useful Conversions

| Multiply this | By this | To obtain this |
|---------------|---------|-------------------|
| MJ/kg | 429.923 | Btu/lb |
| MJ/kg | Density | MJ/litre |
| kg/l | 1000 | kg/m ³ |

| Divide this | By this | To obtain this |
|-------------|---------|----------------|
| MJ/litre | 105.506 | Therms/litre |

'Typicals' are expected qualities based on recent historical production levels and should therefore not be considered a guarantee of quality

For Health & Safety information refer to the most current version of the product MSDS