



**SULPHUR FREE (MAXIMUM 10 PPM) GAS OIL TO BS 2869:2010-PART 1: CLASS A2**

| PROPERTY & UNITS                                     | LIMIT         |                                      | TEST METHOD<br>Note (1)                        |
|--|---------------|--------------------------------------|--|
| Appearance   |               | Free from visible water and sediment | Visual   |
| Colour   |               | Red                                  | Visual   |
| Odour  |               | Merchantable                         |  |
| Density @ 15C (kg/m3)                                | Typical Range | 820.0 - 875.0                        | BS EN ISO 3675 / 12185                         |
| <b>Cold Filter Plugging Point</b>                    |               |                                      | BS EN 116                                      |
| Winter C (Note 2)                                    | Max           | -12                                  |  |
| Summer C (Note 2)                                    | Max           | -4                                   |  |
| <b>Cloud Point</b>                                   |               |                                      | ASTM D2500 / IP219                             |
| Winter C (Note 2)                                    | Max           | -2                                   |  |
| Summer C (Note 2)                                    | Max           | +3                                   |  |
| Flash Point (PMCC) C                                 | Min           | 56                                   | BS EN ISO 2719                                 |
| Cetane Number / DCN or Cetane Index                  | Min<br>Min    | 45.0 (Note 5)<br>45.0 (Note 5)       | BS EN ISO 5165 / BS 2000-498<br>BS EN ISO 4264 |
| Kinematic viscosity mm <sup>2</sup> /s @ 40C         | Min - max     | 2.00 - 5.00                          | BS EN ISO 3104                                 |
| <b>Sulphur content (mg/kg)</b>                       |               |                                      | BS EN ISO 20846 / 20884                        |
| At point of manufacture                              | Max           | 10 (Note 8)                          |  |
| At point of distribution to end user                 | Max           | 20 (Note 8)                          |  |
| Copper Corrosion (3 Hr @ 50C)                        | Class         | 1                                    | BS EN ISO 2160                                 |
| Carbon Residue (micro) :- Residue wt% on 10% Bottoms | Max           | 0.30                                 | BS EN ISO 10370                                |
| Ash content % (m/m)                                  | Max           | 0.01                                 | BS EN ISO 6245                                 |
| Particulate content (mg/kg)                          | Max           | 24                                   | IP 415   |
| Water content (mg/kg)                                | Max           | 200                                  | BS EN ISO 12937                                |
| <b>Distillation C</b>                                |               |                                      | BS EN ISO 3405                                 |
| % Vol Rec @ 350C                                     | Min           | 85                                   |  |
| % Vol Rec @ 250C                                     | Max           | 65                                   |  |
| 50% Vol Recovered (Note 3)                           | Range         | 240 - 340                            |  |
| Strong Acid Number (mgKOH/g)                         |               | Zero                                 | BS ISO 6618                                    |
| Lubricity (wear scar dia, micron)                    | Max           | 460                                  | BS 2000 - 450                                  |
| <b>Oxidation stability</b>                           |               |                                      | BS 2000-388<br>BS EN 15751                     |
| 0.0% - 7.0% FAME g/m3 (Note 6)                       | Max           | 25                                   |  |
| 2.0% - 7.0% FAME h                                   | Min           | 20                                   |  |
| FAME content (%v/v) (Note7)                          | Max           | 7.0                                  | BS EN 14078                                    |

Notes.

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| <p>1) Latest Test Methods or technical equivalent used</p> <p>2) Unless otherwise advised the following seasonal dates apply ex refinery or import terminal:<br/>                 Summer : 16 March - 15 October inc<br/>                 Winter : 16 October - 15 March inc<br/>                 Winter : 01 November - 15 March inc for delivery from terminals</p> <p>3) 50 % evaporated is an HMRC requirement.</p> <p>4) Product will be marked with HMR&amp;C statutory marker</p> | <p>5) May contain an ignition improver in which case<br/>                 (i) the carbon residue test is not valid and<br/>                 (ii) the cetane number minimum will apply.</p> <p>6) This test applies to all fuels, additional Rancimat only applies to those fuels containing &gt; 2.00% FAME</p> <p>7) FAME must meet BS EN 14214</p> <p>8) 10/20 ppm sulphur limits applicable from 1 January 2011</p> |
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**THIS SPECIFICATION IS ACCURATE AT THE DATE OF ISSUE, AND SUPERSEDES ALL PREVIOUS ISSUES.**