GreenFlame D100

Description:
Low viscosity sustainable fuel for heating applications.

Specification:
BS EN 2869:2017 (Class A2)

Date of issue:
12th January 2022

Property	Test Method	Units	Limits	
			Min	Max
Appearance (@Ambient Temp)	D 4176	Visual	Clear and bright.	
Ash content (note 6)	IP 4	% (m/m)		0.01
Carbon Residue: on (10% distillation residue) note 4	ASTM D 4530	% (m/m)		0.30
Cold Filter Plugging Point (Note 2) Winter Summer	IP 309	ºC ºC		-12 -4
Copper Corrosion (3hr @ 50ºC)	BS EN ISO 2160	Class		1
Density @ 15ºC	IP 365	kg/m^3	820.0	
Distillation: (Note 5) Recovery @ 250ºC Recovery @ 350ºC	ASTM D86	% (V/V) % (V/V)	85.0	65.0
Fatty acid methyl ester (FAME) content	BS EN 14078	% (v/v)	Zero Added	Zero Added
Flash Point	IP 34	ºC	45	
Kinematic Viscosity @ 40ºC	IP 71	mm^2/s	2.00	6.00
Lubricity, Corrected Mean Wear Scar Diameter (wsd 1.4) @ 60ºC	BS 2000 - 450	µm		460
Oxidation stability: 0.0% - 7.0% FAME (Note 7) 2.0 – 7.0% FAME	BS 2000-388 BS EN 15751	gm/^{3} h	20.0	25.0
Sediment / Total Contamination (or Particulate Matters)	IP 415	mg/kg		24.0
Sulphur content (note 6) At manufacture / purchase At point of final distribution	IP 336	% (m/m)		0.10
Strong Acid Number	IP 139	mg KOH/g		Zero
Water content	IP 438	% (m/m)		0.020

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GreenFlame renewable heating oil can only be used in heating applications, it is not to be used as a fuel for any engine, motor or other machinery.

Greenflame renewable heating oil has been specifically developed as a low sulphur replacement for the light, medium, heavy fuel oils & processed fuel oils that are prevalent in UK industry. It can also be used as an alternative to Gas oil Class D heating products when used in large steam raising applications. Markets with significant usage will particularly benefit from the use of this fuel.

Notes:

1. Latest test methods or technical equivalent used.
2. Unless otherwise advised the following seasonal dates apply: Summer: 16/03 - 15/11, Winter: 16/11 - 15/03
3. May contain an ignition improver in which case carbon residue test is not valid and the cetane number minimum will apply.
4. The limiting value for carbon residue is based on product prior to addition of ignition improver, if used. If a value exceeding the limit is obtained on a finished fuel, alkyl nitrate presence should be calculated in accordance with BS EN ISO 13759. If an ignition improver is present, the limit value for carbon residue of the product shall not be applied. Use of additives does not exempt fuels from conforming to the maximum 0.30% (m/m) carbon residue prior to addition.
5. Calculation of the cetane index will also require distillation values at 10%, 50% and 90% (V/V) recovery points.
6. Sulphur measurements include HMRC approved marker.
7. Oxidation stability by BS 2000-388 is a requirement for all fuels. BS EN 15751 is an additional requirement for fuels containing FAME at concentrations at/or exceeding 2.0% (V/V).
8. FAME meets the requirements of BS EN 14214.

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