

Product Specification Sheet - Ultra35

1. Product Details					
Product	Ultra35				
Applicable Standards:	BS2869:2017 - Class D				
Use:	Middle distillate fuel for heating applications.				
Notes:	<p>Ultra35 heating Gas oil can only be used in heating applications, it is not to be used as a fuel for any engine, motor or other machinery.</p> <p>a) Ultra35 exceeds winter grade all year round b) 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) c) For diesel fuel containing FAME above 2 % (V/V) this is an additional requirement. Not relevant for this specification as zero FAME added</p>				
2. Specification					
Property	Unit	Limits		Test method	Typicals
		Minimum	Maximum		
Kinematic viscosity at 40°C	mm ² /s	2.00	5.00	IP 71	2.50
Density at 15°C	kg/m ³	820.0	-	IP 365	822.0
Carbon residue (micros) (10% V/V) distillation bottoms	% v/v	15.0	-	ASTM D 4530	<0.01
Distillation recovery at 250°C recovery at 350°C	% (v/v)	-	65	ASTM D86	55
	% (v/v)	85	-		88
Flash point	°C	45	-	IP 34	55
Water content	% (m/m)	-	0.020	IP 438	0.004
Particulate content	mg/kg	-	24	IP 415	<5
Ash content	% (m/m)	-	0.01	IP 4	<0.001
Sulfur content	% (m/m)	-	0.10	IP 336	0.03
Copper corrosion (3h at 50°C)	class	-	1	BS EN ISO 2160	1a
Cold filter plugging point (CFPP) Summer (16 March to 15 November) Winter (16 November to 15 March)	°C	-	-4	IP 139	zero
		-	-12		
Lubricity, corrected mean wear scar diameter (wsd 1.4) at 60°C	µm	-	460	BS 2000-450	340
Oxidation stability 0.0-7.0% FAME 2.0-7.0% FAME	g/m ³ h	-	25	BS 2000-388 BS EN 15751	8
		20	-		-
FAME content	% (v/v)	-	7.0	BS EN 14078	Zero added
Specifications that are additional to BS2869:2017 are listed below					
Appearance	Visual	Clear & Bright		D 4176	Clear & Bright
Cloud point	°C		-4	IP 219	-10
Odour	°C	Marketable			Marketable

Additional Data

Specific energy (calorific value), MJ/kg of oil	Gross - 45.74	Net - 42.84
Gross heat of combustion, Cal/g	Gross - 10925	Net - 10235
Carbon / Hydrogen (% m/m)	Carbon - 86.4%	Hydrogen - 13.6%
Nitrogen (%m/m)	<0.1%	
Equivalent to MJ / kg of CO ₂ produced	14.4 MJ kg CO ₂	