

TOPAZ ENERGY LTD - PRODUCT SUPPLY SPECIFICATION

MEDIUM FUEL OIL - 1.00% SULPHUR ##

SAP No: 40003816 FSIA (PSS) No: 55438

BS 2869 – 1998 Class F				Spec Ref Method	IP / ASTM D Equiv. Method	note
And meets SLFD Directive effective 01 Jan 2003						
Applicable period:-			All Year			
Kinematic Viscosity @ 100°C	mm ² /s	max	15.0 - 20.0	BS EN ISO 3104	IP 71 / D 445	(d)
Flash Point	°C	min	68.0	BS EN 22719	IP 34 / D 93	(a) (b)
Sulfur Content	%mm	max	1.00	BS EN ISO 8754	IP 336	
Water Content	%v/v	max	0.75	BS EN ISO 3733 ¹	IP 74	
Ash Content	%mm	max	0.10	BS EN ISO 6245	IP 4 / D 482	
Carbon Residue	%mm	max	18.0	BS EN ISO 10370	IP 398 / D 4530	
Total Sediment: Existent Potential	%mm %mm	max max	0.15 0.10	ISO 10307 - Part ISO 10307 - Part 2	IP 375 IP 390 2b, SMS 2696	
Strong Acid No:	mg/koh/g		Nil	BS 2000-139	IP 139	
Density at 15°C	kg/m ³	max	990.0	---	IP160, 365	
Odour			Marketable	---		(c)
Pour Point	°C	max	24	---	D 97	
Hydrogen Sulphide	mg/kg	max	2	---	IP PM -BJ	
Asphaltenes	%mm	min	0.5	---	IP 143	(b)
Sodium (as a metal)	mg/kg	max	150	---	D1318, SMS1650	

¹ Until BS EN ISO 3733 is published, test shall conform to IP 74/82

Tests in italics are not part of the above BS 2869 specification but are additional requirements by SUK OP.

IMPORTANT NOTE:

This product is for inland supply only. The previous joint Medium/Marine spec is now purely for Marine use only, as the SLFD (S.I 2000 1460) effective 01 Jan 2003 limits Sulphur to a max of 1.00% for product to be used inland.

The Marine Medium Fuel Oil 150cSt grade is now established as a separate grade, it covers additional properties and allows Sulphur to 4.00%max.

- (a) Flash Point min 68°C on production, min 66°C ex secondary distribution locations.
- (b) To cover UK HMCE requirements, minimum Asphaltenes of 0.1% m is permitted provided Flash Point does not exceed 150°C. If Flash Point exceeds 150°C Asphaltenes content must not exceed 0.5%m.
- (c) Odour test to be carried out at a minimum temperature of 25°C.
- (d) BS 2869 does not contain a minimum viscosity level, however marketing have requested we maintain one at 15 mm²/s, we have agreed, with the proviso should production fall below this level we will continue to issue the product after giving notice of actual value so as any customer who's burner equipment is likely to require manual adjustments to settings may be advised accordingly.
- (e) EU Directive regarding changes in Sulphur content requires Sulphur result to be reported to 2 decimal figures.