


FUEL OIL (AR) FOR EXPORT

1. Technical requirements and test methods

№	Properties	Unit	Value		Test Method
			min	max	
1.	Density at 15 °C	g/cm ³	-	1,025	BDS EN ISO 3675 ASTM D 1298 BDS EN ISO 12185
2.	Kinematic viscosity at 80 °C	mm ² /s	-	113,6	BDS EN ISO 3104+AC ASTM D 445 BDS 1766
	or Engler specific viscosity at 80 °C	°E	-	15,0	
3.	Sulphur content	% (m/m)	-	3,5	BDS EN ISO 8754 ASTM D 4294
4.	Water content	% (m/m)	-	0,5*	ASTM D 95
5.	Mechanical impurities, content	% (m/m)			ASTM D 473
6.	Flash point in open cup	°C	110	-	BDS EN ISO 2592 ASTM D 92
7.	Flash point in closed cup	°C	60	-	BDS EN ISO 2719 (B) ASTM D 93 (B)
8.	Pour point	°C	-	30	BDS EN ISO 3016 ASTM D 97
9.	Specific combustion heat (lower)	MJ/kg	39,8	-	ASTM D 4809 BDS ISO 8217
10.	Ash content	% (m/m)	-	0,10	BDS EN ISO 6245 ASTM D 482
11.	Water soluble acids and alkaly		none		BDS 5252
12.	Total sediment**				ASTM D 4870
12.1	Determination by hot filtration	% (m/m)	-	0,10	IP 375 BDS ISO 10307-1
12.2	Determination using standard procedures for ageing ➤ Thermal ageing (procedure A) ➤ Chemical ageing (procedure B)	% (m/m)	-	0,10	IP 390 BDS ISO 10307-2
		% (m/m)	-	0,10	
13.	Vanadium	mg/kg	-	300	ASTM D 5863 (A) IP 470 IP 501
14.	Aluminum + Silicon	mg/kg	-	80	ASTM D 5184 (B) IP 501, IP 470 ISO 10478
15.	Polypropylene		free		BP/V.4/09 -99

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16.	Carbon residue (micro method)	% (m/m)	-	18	ASTM D 189 ASTM D 4530
17.	Asphaltenes	% (m/m)	to be reported		ASTM D 6560 IP 143

Notes:

BDS Bulgarian Standard

* The total value of p. (4+5) do not exceed 0,5 % (m/m).

** The Parameters shall be made when the vessel is loaded.

2. Product description: Dark, viscous liquid.

3. Method for production and sampling:

3.1 By a primary and secondary crude oil processing.

3.2 Sampling procedure corresponds to BDS EN ISO 3170.

➤ Batch is the quantity of one kind or brand product, with same qualitative indices, produced by the same technologies, stored in one or more tanks and accompanied by a test document.

4. Storage: Closed tanks.

5. Transportation and documents:

5.1 Tankers observing the transport regulation of fire hazardous materials.

5.2 The product is classified as UN № 3082 according to UNO (United Nations Organization).

5.3 Each lot shall be accompanied with Test Certificate or Quality Certificate of the test results according to point 1.

5.4 Product SDS (Safety Data Sheet) is submitted to the user prior or at the time of first delivery.

end

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