

“STEAUA ROMANA” REFINERY

Campina, Romania

MARINE FUEL OIL type DMB**Commercial denomination: Marine Diesel Oil – MDO****(ST 4/2006)****Custom code : 2710.19.99****TECHNICAL SPECIFICATIONS :**

CHARACYERISTICS	TECHNICAL CONDITIONS	ANALYSIS METHOD	
		ISO	ASTM
Density at 15 °C, kg/m3	max. 880	3675	D 1298 / 85
Viscosity at 40 °C - mm ² / s,	max. 6-11	3104	D 445 / 96
Cetanic index,	min. 50	4264	D 976-91
Flash point , °C, min.	60	2719	D93- 97
Sulphur, %, (m/m),	max. 0,4	8754	D 4294 / 90
Water, % (v/v), max	0,3	3733	D 1744
Total sediment % (m/m), max.	0,1	10307-2	-
Aspect	clear	visual	visual
Pour point, °C - winter	max. 0	3016	D97-96
- summer	max. 6		
Ash content, % ,	max. 0,01	6245	D 482/95
Carbon residuum, % (m/m), (in 10% distilled residuum)	max. 0,1	6615	D 189 / 97
Total acidity number (TAN), mg KOH/g	max. 0,5	6618	D 974-97
Low calorific power kcal/kg min.	9800	8217	-

*) To be established at the Customer request

GENERAL DESCRIPTION:

Present specification are referring to the MARINE FUEL OIL type DMB produced by mixing of heavy oil fractions obtained by atmospheric distillation with fractions from secondary crude oil processing.

APPLICATIONS:

This product is used as combustible for maritime vessels as per technical specifications.

End users are sole responsible for not using the product in accordance with producer's prescriptions and import country legislation in force.

PACKAGING – STORAGE:

The packaging, marking and storage shall be made as per stipulations of Romanian standard STAS 4225/79 and of product Security Technical Sheet.

SAFETY MEASURES:

Product is delivered only in clean suitable means of transportation, each lot being accompanied by quality and quantity certificates. Quality is guaranteed for 3 (three) months starting from producing date.

As product is flammable, usual caution measures of fire prevention have to be taken when handling and storing this product.

Note: The info in this technical sheet is valid until the 31st of December, 2007. Please to contact STEAUA ROMANA REFINERY in order to see if the document has been revised .