



# U. S. Oil & Refining Co.

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## Marine Diesel Oil<sup>1</sup>

<u>Characteristic</u>	<u>ASTM Test Method</u>	<u>Specifications</u>	
		<u>Min.</u>	<u>Max.</u>
Density @ 15°C kg/m <sup>3</sup>	D 4052		900.0
Gravity, °API @60°F reference only	D 4052	25.8	
Viscosity @ 40°C, mm <sup>2</sup> /s	D 445		11.0
Flash Point, °C	D 93	60	
Pour Point, °C, winter/summer	D 5950		0/6
Sulfur, mass %	D 4294		0.5
Cetane Index, calculated	D 976	35	
Carbon Residue, mass %	D 4530		0.3
Ash, mass %	D 482		0.01
Appearance	D 4176	C&B <sup>2</sup>	
Total sediment, existent, mass%	D 4870		0.10 <sup>2</sup>
Water, vol. %	D 4928		0.3 <sup>2</sup>
Distillation, °F 90% vol recovered	D 86	700 (371°C)	

<sup>1</sup> Product conforms to ISO 8217 ISO-F-DMB specification except sulfur content limit is lower.

<sup>2</sup> If sample clarity affords visual inspection and if clear and with no visible sediment or water, the total sediment existent and water tests shall not be required.