



# GAS OIL 10-S

TESTS	SPECIFICATIONS		REFERENCE METHOD
	Min.	Max.	
Aspect		Clear without impurities	Visual
Color		2	ASTM D 1500
Density at 15°C, kg/m <sup>3</sup>	820	860	ASTM D 4052
Flash Point PM, °C	45		ASTM D 93
Distillation: 95% Recovered, °C		360	ASTM D 86
Kinematic Viscosity at 40°C, cSt or	2,0	4,5	ASTM D 445 or ASTM D 7042
Viscosity Saybolt Universal at 37,8°C, s	34	42	ASTM D 88
Cetane Number (1)	51		ASTM D 613
Cetane Index	46		ASTM D 4737
Oxidation Stability, g/m <sup>3</sup>		25	ASTM D 2274
Corrosiveness to Copper Strip (3 hours at 50°C)		1	ASTM D 130
Water and Sediments, volume %		0.05	ASTM D 2709
Water, mg/kg		200	ASTM D 6304
Total Sulfur, ppm		10	ASTM D 7039 or ASTM D 5453
Conradson Carbon Residue, in 10% of distillation residue, % mass		0,15	ASTM D 189 or ASTM D 4530
Ash content, % mass		0,005	ASTM D 482 or ISO 6245
Cold filter Plugging Point April and August, °C		-1	ASTM D 6371
Cold filter Plugging Point from May to July, °C		-3	ASTM D 6371
Cold filter Plugging Point September and October, °C		0	ASTM D 6371
Pour Point, °C		-5	ASTM D 97
Particulate Contamination, g/m <sup>3</sup>		20,6	ASTM D 6217 or ASTM D 7321
Acid Number, mg KOH/g (3)		Report	ASTM D 664
Lubricity at 60°C, micron		460	ASTM D 6079
Oxidation Stability, hours (2)	20		EN 15751
Biodiesel (UNIT 1100), % vol.		7	EN 14078
Polycyclic aromatic hydrocarbons, % (m/m)		8	ASTM D 6591 o EN 12916
Conductivity, pS/m (4)	25		ASTM D 2624

(1) Cetane Index is acceptable instead of Cetane Number (ASTM D 4737), with a specification of 51 min. In case of dispute, the reference test method is ASTM D613

(2) This is an additional requirement when Gas Oil 10-S contains Biodiesel above 2 % ( V / V )

(3) This determination is required when Gas Oil 10-S contains Biodiesel 6% (V/V) or more

(4) The electrical conductivity of gas oil must be measured at the time of fuel delivery and at its temperature.

The minimum requirement of 25 pS/m in conductivity applies in all instances where the transfer speed is greater than 7 m/s, but for cases of mobile transport sometimes applies to lower speeds according to the conditions of transfer that are detailed in Table 1.

TABLE 1: Transfer Conditions.

<b>Velocity of the fuel in m/s during the loading of:</b>			
<b>Maximum pipe diameter (for a distance 30 s upstream of the delivery)</b>	<b>Tanker truck</b>	<b>Tank wagon</b>	<b>Cargo ships</b>
<b>0,1023 m</b>	≥ 4,9	≥ 7,0	≥ 7,0
<b>0,1541 m</b>	≥ 3,24	≥ 5,2	≥ 7,0
<b>0,2027 m</b>	≥ 2,47	≥ 3,9	≥ 7,0
<b>0,2545 m</b>	≥ 1,96	≥ 3,14	≥ 7,0