



Product Specification Sheet

1 HS FUEL OIL - ARCTIC GRADE ASTM D396 / ASTM D975

<u>Test</u>	<u>Units</u>	<u>Specification</u>	<u>Test Method</u>
		Degrees C (F)	
Visual Inspection	"Visually free of undissolved water, sediment and suspended matter"		PASS
Water and Sediment	Vol %	max	0.05
Density at 15C	kg/m ³	max	850
Flash Point	Celsius	min	38 (100)
Cloud Point	Celsius	max	-48.5 (-55)
Pour Point	Celsius	max	-48.5 (-55)
Distillation, Auto			
IBP	Celsius		Report
10% Recovery	Celsius	max	215(419)
20% Recovery	Celsius		Report
50% Recovery	Celsius		Report
90% Recovery	Celsius	max	288 (550)
Final Boiling Pt	Celsius		Report
Kinematic Viscosity, @ 40C	mm ² /S		1.1* - 2.4
Ash	wt%	max	0.01
Sulfur	wt%	max	0.1 [^] / 0.5
Copper strip corrosion rating	Code	max	3
Cetane Index (4 variable)	Number	min	40
Cetane Index	Number	min	40
Ramsbottom carbon residue on 10% distillation residue	wt%	max	0.15
Gross Heat of Combustion	Btu/Gallon		Report
Lubricity, HFRR @ 60C	micron	typical	520
Conductivity**	pS/m	min	25

Note:

*Minimum Viscosity specification relaxed to 1.1cSt for Arctic Grade fluidity.

**Fuel loading does not exceed conditions of D396 Table 5. No conductivity improver added

^Sulfur limit is 0.1 wt% max (1000ppm max) for fuel distributed within FNSB non-attainment area