



U. S. Oil & Refining Co.

3001 Marshall Avenue, Tacoma, Washington, 98421 (253) 383-1651

Product Specification Aviation Turbine Fuel, Jet A-1(50)

Properties	ASTM Method	Specifications	
		Min.	Max
Total Acidity, mg KOH/g	D3242		0.10
Aromatic, volume %	D1319		25
Naphthalenes, volume %	D1840		3.0
Mercaptan sulfur, mass %, or Doctor Test	D3227		0.003 ¹
Sulfur, mass %	D4294		0.30
Distillation	D86		
10% Recovered, °C			205
50% Recovered, °C		Report	
90% Recovered, °C		Report	
Final Boiling Point, °C			300
Residue, volume %			1.5
Loss, volume %			1.5
Flash Point, Tag Closed, °C	D56	38	
Density @ 15°C, kg/m ³	D4052	775	840
API gravity @ 60°F, °API	D4052	36.8	51.0
Freezing Point, °C	D7153		-45.6 ⁴
Viscosity @ -20°C (-4°F), mm ² /s	D7042		8.0
Net Heat of Combustion, MJ/kg	D3338	42.8	
Smoke Point, mm	D1322	25 ²	
Corrosion, Copper Strip @ 100°C	D130		1B
Thermal Stability @ 275°C ³			
Change in pressure, mm of Hg	D3241		25
Preheater deposit, code	D3241		<3
Existent Gum, mg/100ml	D381		7
Microseparator, Rating	D3948	85	
w/Antioxidant & w/o SDA			
Antioxidant, UOP 344 mg/L			24.0

Product conforms to: ASTM D1655

- 1) The Mercaptan sulfur determination may be waived if the fuel is considered negative by the doctor test described in the ASTM specification D4952
- 2) Fuels having a smoke point less than 25 but not less than 18 and a maximum of 3 volume % of naphthalenes are permitted, provided the supplier (seller) notifies the purchaser of the volume, distribution and smoke point and naphthalene content within 90 days of date of shipment unless other reporting conditions are agreed to by both parties.
- 3) D-1655 specifies JFTOT temperature at 260°C. JFTOT is performed at 275°C to comply with other product requirements.
- 4) -45.6°C is equivalent to -50°F.