

AVIATION TURBINE FUEL, KEROSENE TYPE (JET A-1).....SUPPLIED BY IOC

Jet A-1 marketed by IOC, is a petroleum distillate blended from kerosene fractions, having Aromatics below 25 % v/v. Total sulphur below 0.3 % m, Mercaptan Sulphur below 0.003 % m, Freezing Point below - 47 °C and a Flash point minimum 38°C. It also contains Static Dissipator Additive

It meets the requirements of : IS 1571 : 2008 (Eighth Revision), DEF STAN 91-91 Issue 7, ASTM D 1655-10 (Jet A-1), IATA Guidance Material for Aviation Fuel Specification - 6th Edition, AFQRJOS-Issue 25 (Oct - 08)

Sr No	Characteristic	Units	Requirement	Method of Test Ref to [P:] of IS 1448	
i Appearance					
a	Visual Appearance		Clear, Bright & Visually free from solid matter & un-dissolved water at ambient Temperature	Visual	
b	Colour		Report	ASTM D156/6045	
c	Particulate Contamination at point of manufacture	mg/l	Max 1	IP 423 / ASTM D 5452	
ii Composition					
a	Total Acidity	mg KOH/g	Max 0.015	P:113	
b	Aromatics	% v	Max 25.0 (Civil), 22.0 (Def)	P:23	
c	Sulfur, Total	% m	Max 0.3	P:34	
d	Sulfur, Mercaptan OR Doctor Test	% m	Max 0.0030 (Civil) / 0.002 (Def) Negative	P:109 P:19	
e	Refining Component, at point of manufacture 1 Hydroprocessed Comp 2 Severely Hydroprocessed Comp	% v/v % v/v	Report Report		
iii Volatility					
a	Distillation 1 Initial Boiling Point @ 2 10% v/v Recovery @ 3 50% v/v Recovery @ 4 90% v/v Recovery @ 5 Final Boiling Point @ 6 Residue 7 Loss	°C °C °C °C °C % v % v	Max Max Max Max Max Max Max 300.0 1.5 1.5	Report 205 Report Report 300.0 1.5 1.5	P:18
b	Flash Point (Abel)	°C	Min 38.0	P:20 (See method B)	
c	Density at 15 °C	kg/m3	775.0 to 840.0	P:16	
iv Fluidity					
a	Freezing Point	°C	Max minus 47.0	P:11	
b	Viscosity at minus 20 °C	mm ² /s	Max 8.000	P:25	
v Combustion					
a	Specific Energy OR Product of API Gr & Aniline Pt	MJ/Kg	Min Min 42.80 4800	P:6 P:3	
b	Smoke Point OR...Smoke Point & Naphthalenes	mm mm % v/v	Min Min Max 25.0 19.0 3.00	P:31, ISO 3014 P:31, ISO 3014 P:118	
vi Corrosion					
a	Cu Strip Corrosion for 2 hrs @ 100°C	Class	Not Worse Than 1	P:15	
vii Thermal Stability (JFTOT) @ Control Temp of 260oC					
a	Filter Pressure Differential	mm Hg	Max 25	P:97, ISO 6294	
b	Tube Rating Visual		Less than 3. No peacock or abnormal colour deposits	P:97, ISO 6294	
viii Contaminants					
a	Existent Gum OR Existent Gum with Air	mg/100ml mg/100ml	Max Max 7 7	P:29 P:29	
b	Water Reaction, Interface Rating		Max 1b	P:42	
c	Micro separometer rating at point of manufacture 1 MSEP without SDA 2 MSEP with SDA	Rating Rating	Min Min 85 70	P:142	
ix Electrical Conductivity at point, time & temperature of delivery to the purchaser					
a	Electrical Conductivity	pS/m	Min Max 50 600	ISO 6297	
x Lubricity					
a	Wear Scar Diameter	mm	Max 0.85 (Civil), 0.65 (Def)	ASTM D5001	