

STANDARD SPECIFICATION

Pearl GTL Jet (Aviation Turbine Fuels Jet A-1)

PROPERTY	UNITS	LIMIT	METHOD	Result
Visual Appearance		Clear, bright and visually free from solid matter and undissolved water at ambient, fuel temperature	ASTM D4176	Clear, bright and visually free from solid matter & undissolved water at ambient fuel temp.
Saybolt Colour		Report	ASTM D6045	+30
Particulate Contamination	mg/L	Max. 1.0	ASTM D5452	0.24
PARTICULATES				
Channel counts $\geq 4 \mu\text{m}$ (c)	mg/L	Report	IP 565	1039
Channel counts $\geq 6 \mu\text{m}$ (c)	mg/L	Report	IP 565	377
Channel counts $\geq 14 \mu\text{m}$ (c)	mg/L	Report	IP 565	46
Channel counts $\geq 21 \mu\text{m}$ (c)	mg/L	Report	IP 565	9
Channel counts $\geq 25 \mu\text{m}$ (c)	mg/L	Report	IP 565	5
Channel counts $\geq 30 \mu\text{m}$ (c)	mg/L	Report	IP 565	2
ISO Code $\geq 4 \mu\text{m}$	mg/L	Report	IP 565	17
ISO Code $\geq 6 \mu\text{m}$	mg/L	Report	IP 565	16
ISO Code $\geq 14 \mu\text{m}$	mg/L	Report	IP 565	13

ISO Code \geq 21 μ m	mg/L	Report	IP 565	10
ISO Code \geq 25 μ m	mg/L	Report	IP 565	9
ISO Code \geq 30 μ m	mg/L	Report	IP 565	8
PROPERTY	UNITS	LIMIT	METHOD	Result
COMPOSITION				
Total Acidity	mg KOH/g	0.015 Max	ASTM D3242	0.002
Total Aromatics	% v/v	8.4 to 26.5	ASTM D6379	11.8
Total Sulfur	% m/m	0.3000 Max	ASTM D5453	0.0004
Mercaptan Sulfur	% m/m	0.0030 Max	IP 342	<0.0003
VOLATILITY				
DISTILLATION:				
T50-T10	°C	15.0 Min	ASTM D 86	23.2
T90-T10	°C	40.0 Min		64.8
Initial Boiling Point	°C	Report		152.2
FUEL RECOVERED:				
10% v/v Recovered	°C	205.0 Max	ASTM D 86	165.8
50% v/v Recovered	°C	Report		189.0
90% v/v Recovered	°C	Report		230.6

End Point	°C	300.0 Max		248.3
Residue	% v/v	1.5 Max		1.3
Loss	% v/v	1.5 Max		0.8
Flash Point	°C	38.0 Min	IP 170	43.0
Density @ 15 °C	kg/m ³	775.0 to 840.0	ASTM D4052	778.1
PROPERTY	UNITS	LIMIT	METHOD	Result
FLUIDITY				
Freezing Point	°C	-47.0 Max	ASTM D5972	-55.2
Viscosity at minus 20 °C	mm ² / s	8.000 Max	ASTM D445	3.397
COMBUSION				
Smoke Point	mm	Min 25.0	ASTM D1322	30.9
Specific Energy, net	MJ/kg	Min 42.80	ASTM D3338	43.589
CORROSION				
Copper Strip Corrosion (2Hr @100°C)		Max 1	ASTM D130	1a
STABILITY				
Thermal Stability, JFTOT				
Control Temperature	°C	260 Min		260
Tube Deposit Rating		Less than 3. No Peacock (P) or Abnormal (A) color deposits	ASTM D3241	1
Filter Pressure Differential	mm Hg	25 Max		<1

CONTAMINANTS				
Existent Gum	mg/10 0 ml	7 Max	IP 540	<1
Microseparometer (MSEP)		70 Min	ASTM D3948	86
CONDUCTIVITY				
Electrical Conductivity	pS/m	50 to 600	ASTM D2624	281
Conductivity Temperature	°C	Report		26.0
LUBRICITY				
BOCLE wear scar diameter	mm	0.85 Max	ASTM D 5001	0.61

It is Certified that this sample has been tested using the test methods stated and the batch represented by the samples conforms to the latest issue (and amendments) of AFQRJOS Checklist (Incl DEF-STAN 91-091 and ASTM D1655-12).