

Appendix 3.1



ExxonMobil Jet Fuel

Product Description

Jet A and Jet A-1 are kerosene-type fuels. The primary difference between the two is freeze point, the temperature at which wax crystals disappear in a laboratory test.

Jet A, which is mainly used in the United States, must have a freeze point of minus 40°C or below and does not typically contain static dissipator additive. Jet A-1 must have a freeze point of minus 47°C or below and for locations outside the United States, this fuel normally contains static dissipator additive. There are other key differences between the manufacturing specification within the United States and Europe/Africa/Middle East/Australasia.

Def. Stan. 91-91 has an additional requirement for lubricity for Jet A-1.

ExxonMobil Jet A and ExxonMobil Jet A-1 meet the requirements of ASTM D1655 Standard Specification for Aviation Turbine Fuels. ExxonMobil Jet A-1 also complies with U.K. DEF STAN 91-91, and the JIG (Joint Inspection Group) Aviation Fuel Requirements for Jointly Operated Systems (Check List). In all cases, the most recent issue of relevant specifications applies to the product supplied.

Specifications

ExxonMobil Jet A meets the following industry specifications:	ExxonMobil Jet A	ExxonMobil Jet A-1
ASTM D 1655	X	X
Military	ExxonMobil Jet A	ExxonMobil Jet A-1
Approved against Mil U.K. DEF STAN 91-91	Not applicable	X
Approved against Mil and the JIG (Joint Inspection Group) Aviation Fuel Requirements for Jointly Operated Systems (Check List)	Not applicable	X

Product Properties

	Jet A	Jet A-1
Acidity, mg KOH/g	0.10 Max.	0.10 Max.
Aromatics, Vol. %	25 Max.	25.0 Max.ax.
Sulphur, mercaptan, Wt. %	0.003 Max.	0.003 Max.
Sulphur, total, Wt. %	0.30	0.30
10% Distillation, °C	205 Max.	205.0 Max.
Final Boiling Point, °C	300 Max	300.0 Max
Distillation Residue, %	1.5 Max.	1.5 Max.
Distillation Loss, %	1.5 Max.	1.5 Max.
Flash Point, °C	38 Min.	38.0 Min.
Density @ 15°C, kg/m ³	775/840	775/840.0
Freeze Point, °C	-40 Max	-47.0 Max
Viscosity @ -20°C, mm/s	8.0 Max.	8.0000 Max.
Net Heat of Combustion, MJ/kg	42.8 Min.	42.80 Min.
One of the following shall be met		

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Characteristics

WEIGHT

MTOW:	7,800 kg	17,196 lb
Typical O&G mission empty weight:	4,701 kg	10,364lb

ENGINES: TWO PRATT & WHITNEY PT6C-67E WITH DUAL CHANNEL FADEC

Takeoff Power:	1,324 kW	1,776 shp
Maximum Continuous Power:	1,227 kW	1,645 shp
One Engine Inoperative(OEI) 30 sec:	1,541 kW	2,067 shp

FUEL

Standard fuel tanks, ground pressure refuelling	2,616 liters	2,066 kg	4,555 lb
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OVERALL DIMENSION

From rotor disc to tail rotor disc:	18.06 m	59.25 ft
From nose to tail rotor disc:	15.68 m	51.44 ft
Rotor disc dia.:	14.80 m	48.56 ft
Tail rotor disc dia.:	3.20 m	10.50 ft
Overall height (tail rotor disc dia.):	5.34 m	17.52 ft

LUGGAGE HOLD

Surface:	3,1 m ²	33,4.ft ²
Volume:	2,3 m ³	81,9.ft ³

CABIN

Length:	4.1 m	13.45 ft
Width:	2.13 m	6.99 ft
Height:	1.40 m	4.59 ft
Surface:	8 m ²	86.1 ft ²
Volume:	12 m ³	423.8 ft ³

Major operational features/options

- DMAP
- HTAWS
- SVS
- AFCS coupled TCAS II
- Fleet tracking System
- AIS
- ADSB
- Electronic flight bag
- Direction Finder
- Search/weather radar
- EOS
- Search light
- Single/double hoist
- Central mission display
- Engine declutch function for APU mode
- Pressure refueling
- HEELS
- ADELTA
- ELT
- CVFDR
- HUMS
- HFDM
- Cargo sling