

1) JET FUEL Product Description:

JET FUEL is a clear to straw-colored **fuel**, based on either an unleaded kerosene (**Jet A-1**), or a naphtha-kerosene blend (**Jet B**). Similar to diesel **fuel**, it can be used in either compression ignition engines or turbine engines.

American Jet Fuels A, A-1, and A-50 are kerosene-type aviation turbine fuels. They are manufactured to meet the requirements of ASTM D1655, Standard Specification for Aviation Turbine Fuels or Ministry of Defence: Defence Standard 91-91 Turbine Fuel, Aviation Kerosine Type, Jet A-1.

Specification Jet Fuel

Jet A-1

Jet A-1 is a kerosine grade of fuel suitable for most turbine engined aircraft. It has a flash point minimum of 38 degrees C (100°F) and a freeze point maximum of -47 degrees C. It is widely available outside the U.S.A. The main specifications for Jet A-1 grade (see below) are the UK specification DEF STAN 91-91 (Jet A-1) Nato code F-35, (formerly DERD 2494) and the ASTM specification D1655 (Jet A-1).

Jet A

Jet A is a kerosine grade fuel, normally only available in the U.S.A. It has the same flash point as Jet A-1 but a higher freeze point maximum (-40°C). It is supplied against the ASTM D1655 (Jet A) specification.

Jet B

Jet B is a distillate covering the naphtha and kerosine fractions. It can be used as an alternative to Jet A-1 but because it is more difficult to handle (higher flammability), there is only significant demand in very cold climates where its better cold weather performance is important. ASTM have a specification for Jet B but in Canada it is supplied against the Canadian Specification CAN/CGSB 3.23

TS-1

TS-1 is the main jet fuel grade available in Russian and CIS states. It is a kerosine type fuel with slightly higher volatility (flash point is 28C minimum) and lower freeze point (<-50C) compared to Jet A-1.

American Civil Jet Fuels

The basic civil jet fuel specification used in the United States of America is ASTM Specification for Aviation Turbine Fuels D 1655, which defines the requirements for three grades of fuel:-

- Jet A, a kerosine type fuel having a maximum freeze point of -40 degrees C.
- Jet A-1, a kerosine type fuel, identical with Jet A but with a maximum freeze point of -47 degrees C.
- Jet B, a wide-cut type fuel.

Jet A is used within the United States by domestic and international airlines.

Jet B is rarely available nowadays except in parts of northern Canada where its lower freeze point and higher volatility is an advantage for handling and cold starting.

	D1655 A	D1655 A-1	D1655 A-50	DS 91-91 A-1
<i>Product Number</i>	<i>216103</i>	<i>216101</i>	<i>216100</i>	<i>235611</i>
<i>SDS/MSDS Number</i>	<i>0513</i>	<i>0513</i>	<i>0513</i>	<i>0513</i>