

BARREL FLUORO FLUID T SERIES

BARREL FLUORO FLUID T SERIES are colorless, clear, odorless, inert, nonflammable liquids with a completely fluorinated structure.

Since this nonflammable liquid does not contain chlorine in its molecules, it has a zero ozone depletion potential and can be used as highly safe cold medium liquids.

1. Features

- (1) Clear and colorless liquid.
- (2) Inert liquid, will not attack metals, rubber, plastics, etc.
- (3) Fully fluorinated and therefore nonflammable.
- (4) Excellent low-temperature characteristics.
- (5) Excellent heat transfer capability.
- (6) Excellent electrical characteristics.
- (7) Highly safe and non-toxic in practical use.
- (8) Ozone depletion factor is zero and not subject to CFC regulations.

2. Typical properties

Property	BARREL FLUORO FLUID			
	T-6	T-10	T-14	T-16
Boiling Point °C	56	95	128	174
Density 25°C kg/cm ³	1,680	1,794	1,830	1,880
Flash Point °C	None	None	None	None
Kinematic Viscosity 25°C mm ² /s	0.4	0.8	0.8	2.8
Pour Point °C	-90	-127	-50	-50
Vapor Pressure 25°C kPa	30.9	6.5	1.3	0.3
Specific Heat 25°C kJ/kg·K	1.05	1.04	1.05	1.05
Thermal Conductivity W/m·K	0.058	0.057	0.067	0.067
Latent Heat(Boiling Point) kJ/kg	88	86	84	71
Dielectric Breakdown Voltage 25°C kV/2.5mm	38	40	43	42
Water Solubility mass ppm	10	11	11	7
Ozone Depletion Potential (CFC-11=1.000)	0.000	0.000	0.000	0.000

3. Applications

As cooling/heating medium liquids, it has excellent nonflammability, low temperature characteristics, thermal stability, and heat transfer capability.

4. Handling Precaution

BARREL FLUORO FLUID are nonflammable, nontoxic, odorless, and extremely safe fluids.

However, at temperatures above 200°C, it may produce toxic decomposition products including traces of perfluorobutylene and hydrogen fluoride, so the following precautions must be strictly observed.

- (1) Avoid exposure of liquids and vapors to open flames, electric heaters and arc discharges.
- (2) Smoking is prohibited in the work area.
- (3) Be sure to attach an overheat prevention device to the equipment used. In the unlikely event that the temperature becomes abnormally high, turn off the power switch, seal the device, and cool it.
- (4) Install an appropriate local exhaust system to prevent steam from staying in the work area.
- (5) Avoid repeated inhalation of high concentration vapors and prolonged exposure to high concentration vapors.

The Barrel Fluorofluoride T series falls under the category of goods specified in Appended Table 1 of the Export Order in accordance with the provisions of the Foreign Exchange and Foreign Trade Act Law, so when exporting, please follow the necessary procedures such as applying for an export license from the Japanese government.

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●Our fluorine products have been developed and manufactured for general industrial applications. If you wish to use our products in a special application, please test them beforehand and confirm their safety before use. Do not use this product for medical or implant applications.
●When using this product, please confirm the precautions for handling and storage, first aid, disposal, and other precautions in the Safety Data Sheet (SDS).
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