

TECHNICAL DATA SHEET



TMC-40

TMC-40 is non-flammable, chemically and thermally stable with low toxicity. TMC-40 is fully fluorinated thus it is chemically inert, non-flammable and non-conductive. With these properties, TMC-40 is designed for the following industrial and electronic applications:

- Heat transfer fluid for semiconductor, data centers, aviation electronics, power electronics and high performance computing
- Electronics testing and liquid burn-in testing and environment stress screening.

Features

- REPLACEMENT FOR 3M™ FC-40
- MISCIBLE WITH 3M™ FC-40
- COMPATIBLE WITH MOST METALS, PLASTICS AND ELASTOMERS
- RECLAIMABLE BY TMC INDUSTRIES, INC.
- NONFLAMMABLE

Packaging Information

Sold in:

- 1 gal. Jug - 11 lbs. (5 kg)
- 5 gal. Pail - 44 lbs. (20 kg)
- 55 gal. Drum - 550 lbs. (250 kg)

Properties

Appearance	Clear, colorless liquid
Molecular Weight	650 (g/mol)
Boiling Point	165 (°C)
Pour Point	-57 (°C)
Vapor Pressure	290 (Pa)
Density	1.856 (g/cm ³)
Kinematic Viscosity	2.2 (cSt)
Absolute Viscosity	4.1 (cP)
Liquid Specific Heat	1100 (J/Kg ⁻¹ °C ⁻¹)
Liquid Thermal Conductivity	0.065 (W/m °C ⁻¹)
Dielectric Constant	1.9
Volume Resistant	~1012 (Ohm-cm)
Coefficient of Expansion	0.0012 (°C ⁻¹)
Refractive Index	1.29
Surface Tension	16 (mN/m)
Dielectric Strength	>40Kv
GWP	6000
Ozone Depletion Potential	0
Flash Point	None

Toxicity Properties

TMC-40 is virtually non-irritating to the eyes and skin. The product also demonstrates very low toxicity and was not mutagenic. Please see the SDS of TMC-40 Fluorinated Engineering Fluid for detail information.

Materials Compatibility

TMC-40 is compatible with most metals, plastics, and elastomers, please contact TMC Industries, Inc. for further recommendations and technical assistance.

Health & Safety

Before using this product, please read the current product Safety Data Sheet (available through your TMC Industries sales or technical service representative) and the precautionary statement on the product package. Follow all applicable precautions and directions. Electronic fluorinated liquid TMC-40 liquid is non-flammable and is highly resistant to thermal breakdown and hydrolysis in storage and during use. Recommended handling procedures are given in the Safety Data Sheet.

Recycle and Reclaim Options

TMC Industries Inc. reclaim service provides significant savings over the cost of new fluid and helps protect the environment by drastically reducing the amount of your waste stream.

Reduce your hazardous waste disposal and achieve better environmental stewardship. TMC Industries, Inc. properly disposes of the contaminants.

Quality Assurances

We guarantee our reclaimed solvents to have new qualities and performance capabilities. To support our confidence, pre- and post-processing analytical data accompanies each shipment.

Save on Disposal Costs

Reduce your hazardous waste disposal. Have TMC Industries reclaim your contaminated fluids to their original state and purity and return them to you at about 1/3 the cost of replacing them with new fluids.



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