

# TMC HFE-377E ENGINEERED FLUID

TMC HFE-377E Engineered Fluid is an alternative for 3M™ Novec™ 73DE, Vertrel™ SDG, HCFC-225, and Tergo™ Metal Cleaning Fluid.

## PRODUCT INFORMATION

TMC HFE-377E Engineered Fluid is a precision cleaning solvent mixture of 1,2 trans-dichloroethylene and hydrofluoroether (HFE). It was designed with no hydrofluorocarbons (HFCs), which are subject to an EPA phase-down. It is a direct substitute for n-propyl bromide (nPB), Novec 73DE, and other industrial solvents.

## APPLICATIONS

TMC HFE-377E has a broad-spectrum cleaning capability for many types of contaminants, including adhesives, buffing compounds, drawing oils, hydraulic oils, greases, refrigerant oils, silicone oils, and waxes.

- Precision Cleaning
- Vapor Degreasing
- Ultrasonic Cleaning
- Medical Device Cleaning

## FEATURES

- Non-Flammable
- No Flash Point
- Low Viscosity
- Low Surface Tension
- Zero Surface Residue

## MATERIALS COMPATIBILITY

TMC HFE-377E is compatible with all metals and most plastics and elastomers.

### Compatible Materials

Polyethylene	Polypropylene
Polyvinylchloride (PVC, CPVC)	Acetal
Polyester (PET, BET)	Epoxy
Polyimide (PI, PEI, PAI)	PTFE, Teflon
Polyetherketone (PEK)	Polysulfone (PSO)
Polyaryletherketone (PEEK)	Phenolic
Polyarylsulfone (PAS)	Ionomer
Polyphenylene Sulfide (PPS)	EPDM

### Incompatible Materials

Polystyrene	Epichlorohydrin
Polyphenylene Oxide (PPO)	Silicone
Polycarbonate	Natural Rubber
Acrylonitrile Butadiene Styrene (ABS)	Acrylic



# TMC HFE-377E Continued

## PHYSICAL & ENVIRONMENTAL PROPERTIES

PROPERTY	UNITS	TMC HFE-377E
<b>Form</b>	—	Liquid
<b>Color</b>	—	Colorless
<b>Odor</b>	—	Odorless
<b>Boiling Point</b>	°C	45.5
<b>KB Value</b>	—	94
<b>Specific Gravity</b>	g/mL	1.305
<b>Vapor Pressure</b>	kPa	38.9
<b>Heat Capacity (20°C)</b>	cal/g	0.270
<b>Density</b>	g/mL	1.272
<b>Vapor Flammability in Air: Lower Limit</b>	—	5.7%
<b>Vapor Flammability in Air: Upper Limit</b>	—	19%
<b>Viscosity (20°C)</b>	cSt	0.41
<b>Volatile Organic Compounds (VOC) Content</b>	g/L	1115
<b>Ozone Depletion Potential (ODP)</b>	—	0.0
<b>Global Warming Potential (GWP)</b>	—	87
<b>Flash Point</b>	—	None

Not for specification purposes. All values @ 25°C unless otherwise specified.

# TMC HFE-377E Continued

## COMPLIANCE

TMC HFE-377E is not classified as flammable or hazardous for transport by DOT.

## PACKAGING

TMC HFE-377E is available in the following sizes and weights:

- **1 Gallon Jug** — 10 lb / 4.5 kg
- **5 Gallon Pail** — 50 lb / 22.7 kg
- **55 Gallon Drum** — 550 lb / 250 kg
- **Sample** — 2.2 lb / 1 kg
- **275 Gallon Tote** — Available Upon Request

## SHELF LIFE & STORAGE

Shelf life is 5 years from the date of manufacture when stored in the original packaging materials and stored under normal conditions. TMC will re-certify material every 5 years up to 20 years.

## DISPOSAL & RECYCLING

This fluid can be recycled and reused. Help protect the environment and don't pay for expensive disposal services.

TMC Industries can reclaim your used fluorinated fluids, restoring them to like-new condition, and save you up to 50% in replacement fluids while protecting the environment.

TMC Reclaimed Fluids are tested to meet new product specifications. It will be clear and odorless, and a Certificate of Analysis is issued with every order.

TMC Industries offers a **100% satisfaction guarantee** on all our reclaimed fluids. We back this up with a no-questions-asked refund policy. To learn more, [click here](#).

## EXTERNAL DOCUMENTS

- [TMC Used Fluid Reclamation Service Brochure](#)

**Safety and Handling:** Before using this product, please thoroughly read the current product SDS and label, following all applicable safety precautions described therein (e.g., recommended storage and safe handling, appropriate exposure controls and personal protective equipment (PPE), addressing accidental spills, disposal considerations, etc.).

**Safety Data Sheet:** Consult Safety Data Sheet before use.

**Regulatory:** For regulatory information about this product, contact your TMC representative.

**Technical Information:** The technical information, recommendations and other statements contained in this document are based upon tests or experience that TMC believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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