

MATERIAL SAFETY DATA SHEET

Hampford Research, Inc.

SECTION 1. -----CHEMICAL PRODUCT AND COMPANY IDENTIFICATION-----

TFEM

CHEMICAL FORMULA: C6H7F3O2

CAS NUMBER: 352-87-4

CHEMICAL NAME: 2-methyl-2-propenoic acid, 2,2,2-trifluoroethyl ester

REVISED: 10/15/2002

MANUFACTURER: Hampford Research, Inc
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Stratford, CT 06615

EMERGENCY TELEPHONE NUMBERS: OFFICE (203) 375-1137
CHEMTREC (800) 424-9300

SECTION 2. -----COMPOSITION / INFORMATION ON INGREDIENTS-----

COMPONENT	CAS #	% BY WEIGHT	EXPOSURE LIMITS
2,2,2-trifluoroethyl methacrylate	352-87-4	>99%	

SECTION 3. -----HAZARDS IDENTIFICATION-----

EYES: Irritating to eyes.

SKIN: Irritating to skin avoid repeated contact.

SWALLOWING: Harmful if ingested.

INHALATION: Irritating to respiratory system.

SECTION 4. -----FIRST AID MEASURES-----

EYE CONTACT:
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Seek medical aid immediately.

SKIN CONTACT:
In case of contact, wash skin with soap and copious amounts of water for at least 15 minutes. Wash contaminated clothing before reuse. Material may irritate and sensitize certain individuals on repeated exposure.

INGESTION:
If swallowed, do not induce vomiting. Drink milk or water. Seek medical aid immediately.

INHALATION:
If inhaled, remove to fresh air. Administer oxygen if subject has difficulty breathing. Seek medical aid immediately.

SECTION 5. -----FIRE FIGHTING MEASURES-----

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Exposure to fire may cause rapid polymerization and explosive rupture of storage containers.

FIRE EXTINGUISHING MEDIA:
Water spray, carbon dioxide, dry chemical powder or appropriate foam.

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SPECIAL FIREFIGHTING INSTRUCTIONS:

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6. -----ACCIDENTAL RELEASE MEASURES-----

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Wear self-contained breathing apparatus, chemical safety goggles, rubber boots and heavy rubber gloves.

SPILL CLEANUP MEASURES:

Vent fumes to outside, shut off all sources of ignition and evacuate area. Absorb spill using a suitable absorbent material. Dispose of absorbed material in a closed solids waste container.

SECTION 7. -----HANDLING AND STORAGE-----

HANDLING AND STORAGE REQUIREMENTS:

Store containers below 75°F out of direct sunlight. Due to possibility of polymer formation during long term storage, inhibited product should be used within six months of date of manufacture or inhibitor replenished and product aerated.

SECTION 8. -----PERSONAL PROTECTION/EXPOSURE CONTROLS-----

EYE/FACE PROTECTION: Wear safety goggles. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact from airborne material. Eye bath available.

SKIN PROTECTION: Wear appropriate impervious clothing such as compatible chemical-resistant coverall and gloves. Safety shower available.

RESPIRATORY PROTECTION: Wear face mask organic vapor cannister.

ENGINEERING CONTROLS: Local exhaust required.

SECTION 9. -----PHYSICAL AND CHEMICAL PROPERTIES-----

PHYSICAL STATE: Liquid

MELTING POINT: N/A

BOILING POINT: 115°C @ 760 mm Hg

SPECIFIC GRAVITY: 1.18

APPEARANCE: Clear, colorless

ODOR: Light, ester/ether-like

OTHER: Solubility in water: insoluble

SECTION 10. -----STABILITY AND REACTIVITY-----

INCOMPATIBILITIES:

Avoid metals, strong oxidizers and free radical initiators.

HAZARDOUS DECOMPOSITION:

Burning will produce noxious fumes, oxides of carbon and possible HF.

CHEMICAL STABILITY:

Stable at ambient temperatures.

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HAZARDOUS POLYMERIZATION:

Polymerization may occur if containers are exposed to prolonged or excessive heat.

SECTION 11. -----TOXICOLOGICAL INFORMATION-----

TOXICOLOGICAL EFFECTS:

Toxicity: Oral LD50 (rat) = 349 mg/kg (toxic); HMIS/NFPA CODE: Health = 2; Flammability = 3; Reactivity = 2

SECTION 12. -----ECOLOGICAL INFORMATION-----

ECOLOGICAL EFFECTS:

Data not yet available.

SECTION 13. -----DISPOSAL INFORMATION-----

WASTE MANAGEMENT PROCEDURES:

Dispose of waste material in an approved chemical incineration facility. Any disposal method must comply with all Federal, State and Local environmental regulations.

SECTION 14. -----TRANSPORT INFORMATION-----

TRANSPORTATION INFORMATION:

Contact Hampford Research, Inc. for transportation information.

-----DOT (DOMESTIC SURFACE)-----

PROPER SHIPPING NAME:
HAZARD CLASS OR DIVISION:
UN / NA NUMBER:
PACKING GROUP:
DOT PRODUCT RQ lbs (kgs):
HAZARD LABEL (s):
HAZARD PLACARD (s):

-----IMO / IMDG CODE (OCEAN)-----

PROPER SHIPPING NAME:
HAZARD CLASS DIVISION NUMBER:
UN NUMBER:
PACKAGING GROUP:
HAZARD LABEL (s):
HAZARD PACKARD (s):

-----ICAO / IATA (AIR)-----

PROPER SHIPPING NAME:

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HAZARD CLASS DIVISION NUMBER:
UN NUMBER:
SUBSIDIARY RISK:
PACKING GROUP:
HAZARD LABEL (s):
RADIOACTIVE?:
PASSENGER AIR - MAX QTY:
PASSENGER PACKING INSTRUCTION:
CARGO AIR - MAX QTY:
CARGO AIR PACKAGING INSTRUCTION:

SECTION 15. -----REGULATORY INFORMATION-----

REGULATORY INFORMATION:

On TSCA Inventory
July 2001 Inventory Tape.
On NDSL
Canada Gazette, Part I, January 31, 1998.
On EINECS
Annex to Official Journal of the European Communities, 15 June 1990.
On ENCS
Unlisted chemical name. For ENCS chemical class or category name,
refer to ENCS No. 2-1031.
On AICS
Australian Inventory of Chemical Substances, June 1996 Ed.
On PICCS
Philippines Inventory of Chemicals and Chemical Substances, 2000.
This product contains the following toxic components which are subject to the reporting requirements of Section 313
of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372: 2,2,2-trifluoroethyl
methacrylate

SECTION 16. -----ADDITIONAL INFORMATION-----

ADDITIONAL INFORMATION:

NA

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Hampford Research, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. Hampford Research grants permission to make unlimited paper copies for internal use only.

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