

Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

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SECTION 1, ----- CHEMICAL IDENTIFICATION-----

CATALOG #: 5180-3-X0

NAME: (TRIFLUOROMETHYL)TRIMETHYLSILANE, 0.5M IN THF

SYNONYM: RUPPERT'S REAGENT; TMS-CF3; TFMTMS, (TRIMETHYLSILYL)TRIFLUOROMETHANE

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

SUBSTANCE NAME CAS # PERCENT

(TRIFLUOROMETHYL)TRIMETHYLSILANE, NONE 100

0.5M IN THF

 INGREDIENT NAME
 CAS #
 PERCENT

 TETRAHYDROFURAN
 109-99-9
 ~92

 TFMTMS
 81290-20-2
 ~8

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

LABEL PRECAUTIONARY STATEMENTS

FLAMMABLE.

HARMFUL.

HARMFUL IF SWALLOWED.

MAY FORM EXPLOSIVE PEROXIDES.

IRRITANT

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

TARGET ORGAN EFFECT

LIVER. KIDNEYS. CENTRAL NERVOUS SYSTEM.

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

ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING.

INHALATION EXPOSURE

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE

ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

DERMAL EXPOSURE

IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.

EYE EXPOSURE

IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

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

FLAMMABLE HAZARDS

FLAMMABLE HAZARDS: YES

PEROXIDE FORMER: YES

EXPLOSION HAZARDS

VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK. CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS. FLASH POINT

-4 °F / -20 °C METHOD: CLOSED CUP

EXTINGUISHING MEDIA

SUITABLE: FOR SMALL (INCIPIENT) FIRES, USE MEDIA SUCH AS "ALCOHOL" FOAM, DRY CHEMICAL, OR CARBON DIOXIDE. FOR LARGE FIRES, APPLY WATER FROM AS FAR AS POSSIBLE. USE VERY LARGE QUANTITIES (FLOODING) OF WATER APPLIED AS A MIST OR SPRAY; SOLID STREAMS OF WATER MAY BE INEFFECTIVE. COOL ALL AFFECTED CONTAINERS WITH FLOODING QUANTITIES OF WATER.

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. SPECIFIC HAZARD(S): FLAMMABLE LIQUID. EMITS TOXIC FUMES UNDER FIRE CONDITIONS. VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK.

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

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

EVACUATE AREA. SHUT OFF ALL SOURCES OF IGNITION. USE NONSPARKING TOOLS.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

COVER WITH DRY-LIME, SAND, OR SODA ASH. PLACE IN COVERED CONTAINERS USING NON-SPARKING TOOLS AND TRANSPORT OUTDOORS. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

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

HANDLING

USER EXPOSURE: DO NOT BREATHE VAPOR. DO NOT GET IN EYES, ON SKIN, ON CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.

SUITABLE: KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.

STORE AT 2-8°C

SPECIAL REQUIREMENTS

HYGROSCOPIC.

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

ENGINEERING CONTROLS

SAFETY SHOWER AND EYE BATH. USE NONSPARKING TOOLS. USE ONLY IN A CHEMICAL FUME HOOD.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU), WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. HAND: COMPATIBLE CHEMICAL-RESISTANT GLOVES.

EYE: CHEMICAL SAFETY GOGGLES.

OTHER: FACESHIELD (8-INCH MINIMUM).

GENERAL HYGIENE MEASURES

WASH CONTAMINATED CLOTHING BEFORE REUSE. DISCARD CONTAMINATED SHOES, WASH THOROUGHLY AFTER HANDLING.

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

APPEARANCE AND ODOR

LIQUID

PHYSICAL PROPERTIES

BOILING POINT: 40°C

VAPOR PRESSURE: 2.8 psi @ 20°C DENSITY: 0.895 g/mL @ 20 °C

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

STABILITY

STABLE: STABLE.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, SILICON OXIDES, HYDROGEN FLUORIDE.

HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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

ROUTE OF EXPOSURE

SKIN CONTACT: CAUSES IRRITATION.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

EYE CONTACT: CAUSES IRRITATION.

INHALATION: MATERIAL IS EXTREMELY DESTRUCTIVE TO THE TISSUE OF

THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. MAY BE HARMFUL

IF INHALED.

INGESTION: HARMFUL IF SWALLOWED.

TARGET ORGAN(S) OR SYSTEM(S)

LIVER. KIDNEYS. CENTRAL NERVOUS SYSTEM.

SIGNS AND SYMPTOMS OF EXPOSURE

UNCONSCIOUSNESS. NAUSEA, DIZZINESS, AND HEADACHE. COUGHING, CHEST PAINS, DIFFICULTY IN BREATHING, NARCOTIC EFFECT, EXPOSURE

CAN CAUSE: CAN CAUSE CNS DEPRESSION.

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

DATA NOT YET AVAILABLE.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

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

DOT

PROPER SHIPPING NAME: FLAMMABLE LIQUIDS, N.O.S. UN#: 1993 CLASS: 3 PACKING GROUP: PACKING GROUP II HAZARD LABEL: FLAMMABLE LIQUID

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

EU ADDITIONAL CLASSIFICATION
SYMBOL OF DANGER: F-Xn
INDICATION OF DANGER: HIGHLY FLAMMABLE. HARMFUL.
RISK STATEMENTS: 11-19-22-36/37/38
SAFETY STATEMENTS: 16-23-24/25-26-36/37/38-45
UNITED STATES REGULATORY INFORMATION
TSCA: NOT LISTED ON TSCA INVENTORY; FOR R&D USE ONLY

SECTION 16. ----- OTHER INFORMATION-----

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE, SYNQUEST LABS, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.