



## SynQuest Laboratories, Inc.

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# Material Safety Data Sheet

Transportation Emergency: 1-800-451-8346

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### SECTION 1. ----- CHEMICAL IDENTIFICATION-----

CATALOG #: 5181-3-02

NAME: DIFLUORODIMETHYLSILANE

SYNONYM: DIMETHYLDIFLUOROSILANE

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

CAS NUMBER: 353-66-2

MDL NUMBER: MFCD00042063

MOLECULAR FORMULA: C<sub>2</sub>H<sub>6</sub>F<sub>2</sub>Si

MOLECULAR WEIGHT: 96.15

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

#### LABEL PRECAUTIONARY STATEMENTS

EXTREMELY FLAMMABLE GAS.

CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED.

HARMFUL.

HARMFUL IF SWALLOWED AND IN CONTACT WITH SKIN.

CORROSIVE.

CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

CAUSES SERIOUS EYE DAMAGE.

FATAL.

FATAL IF INHALED.

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

#### ORAL EXPOSURE

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

#### 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 CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

#### EYE EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

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

**EXPLOSION HAZARDS**

VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK.

**FLASH POINT**

NOT ESTABLISHED

**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.

**FIREFIGHTING**

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

SPECIFIC HAZARD(S): VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK. EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

**EXPOSURE HAZARD(S)**

MATERIAL: IRRITANT. FLAMMABLE GAS.

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

**PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL**

EVACUATE AREA AND KEEP PERSONNEL UPWIND. SHUT OFF LEAK IF THERE IS NO RISK.

**PROCEDURE(S) OF PERSONAL PRECAUTION(S)**

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

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

**HANDLING**

USER EXPOSURE: DO NOT BREATHE GAS. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.

**STORAGE**

SUITABLE: KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. CYLINDER TEMPERATURE SHOULD NOT EXCEED 125°F (52°C).

**SPECIAL REQUIREMENTS**

MOISTURE SENSITIVE.

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

### **ENGINEERING CONTROLS**

SAFETY SHOWER AND EYE BATH. 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 AXBEK (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.

### **GENERAL HYGIENE MEASURES**

WASH CONTAMINATED CLOTHING BEFORE REUSE.

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

### **APPEARANCE AND ODOR**

LIQUEFIED GAS

### **PHYSICAL PROPERTIES**

BOILING POINT: 2 - 3 °C

MELTING POINT: -88 TO -87 °C

VAPOR PRESSURE: 35 psia @ 20°C

## **SECTION 10. ----- STABILITY AND REACTIVITY -----**

### **STABILITY**

CONDITIONS OF INSTABILITY: MAY DECOMPOSE ON EXPOSURE TO MOIST AIR OR WATER. HEAT, FLAME, SPARKS, OTHER IGNITION SOURCES.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

### **HAZARDOUS DECOMPOSITION PRODUCTS**

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

## **SECTION 11. ----- TOXICOLOGICAL INFORMATION -----**

### **ACUTE TOXICITY**

DATA NOT AVAILABLE.

### **SIGNS AND SYMPTOMS OF EXPOSURE**

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

## **SECTION 12. ----- ECOLOGICAL INFORMATION -----**

DATA NOT YET AVAILABLE.

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

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION  
OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.  
APPROPRIATE METHOD OF DISPOSAL OF CONTAMINATED PACKAGING  
CAUTION: NO-RETURN CYLINDER. DO NOT REUSE. EMPTY CYLINDER WILL  
CONTAIN HAZARDOUS RESIDUE. FOLLOW PROPER DISPOSAL TECHNIQUES.

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

PROPER SHIPPING NAME: LIQUEFIED GAS, TOXIC, FLAMMABLE, N.O.S.  
UN#: 3160-C  
CLASS: 2.3[2.1]  
INHALATION HAZARD ZONE C

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

EU ADDITIONAL CLASSIFICATION  
SYMBOL OF DANGER: C, F+, T+  
INDICATIONS OF DANGER: CORROSIVE. EXTREMELY FLAMMABLE. VERY TOXIC.  
RISK STATEMENTS: 12-14-21/22-26-29-34-41-44  
SAFETY STATEMENTS: 9-16-23-24/25-26-36/37/39-38-45  
UNITED STATES REGULATORY INFORMATION  
TSCA: 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.