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## **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 2616-7-54  
NAME: 4-(TRIFLUOROMETHOXY)BENZOYL CHLORIDE

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

CAS #: 36823-88-8  
MF: C<sub>8</sub>H<sub>4</sub>ClF<sub>3</sub>O<sub>2</sub> = 224.57

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

#### **LABEL PRECAUTIONARY STATEMENTS**

FLAMMABLE. CORROSIVE.  
CAUSES BURNS.

#### **HMIS RATING**

HEALTH: 3  
FLAMMABILITY: 3  
REACTIVITY: 0

### **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

**EXPLOSION HAZARDS**

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

**FLASH POINT**

89.6 °F / 32 °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.

**FIREFIGHTING**

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.

**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.

**STORAGE**

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

**SPECIAL REQUIREMENTS**

MOISTURE SENSITIVE.

**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. 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.  
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

CLEAR, COLORLESS LIQUID

### PHYSICAL PROPERTIES

BOILING POINT: 55 - 56 °C @ 2 mmHg  
DENSITY: 1.429 g/cm<sup>3</sup>  
FLASH POINT: 89.6 °F / 32 °C METHOD: CLOSED CUP  
REFRACTIVE INDEX: 1.473

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

### STABILITY

STABLE: STABLE.

CONDITIONS TO AVOID: MOISTURE.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

### HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN FLUORIDE, HYDROGEN CHLORIDE GAS.

### HAZARDOUS POLYMERIZATION

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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

### ROUTE OF EXPOSURE

SKIN CONTACT: CAUSES BURNS.

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

EYE CONTACT: CAUSES BURNS.

INHALATION: MAY BE HARMFUL IF INHALED. MATERIAL IS EXTREMELY DESTRUCTIVE TO THE TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

INGESTION: MAY BE HARMFUL IF SWALLOWED.

### SIGNS AND SYMPTOMS OF EXPOSURE

SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA, AND VOMITING. INHALATION MAY RESULT IN SPASM, INFLAMMATION AND EDEMA

OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS, AND PULMONARY EDEMA. MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT, EYES, AND SKIN.

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

DATA NOT YET AVAILABLE.

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

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. 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: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
UN#: 3265  
CLASS: 8  
PACKING GROUP: PACKING GROUP III  
HAZARD LABEL: CORROSIVE

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

EU ADDITIONAL CLASSIFICATION  
SYMBOL OF DANGER: C  
INDICATION OF DANGER: CORROSIVE.  
R: 10-34  
RISK STATEMENTS: FLAMMABLE. CAUSES BURNS.  
S: 26-36/37/39-45  
SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES, AND EYE/FACE PROTECTION. IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).  
US CLASSIFICATION AND LABEL TEXT  
INDICATION OF DANGER: FLAMMABLE. CORROSIVE.  
RISK STATEMENTS: CAUSES BURNS.  
SAFETY STATEMENTS: KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES, AND EYE/FACE PROTECTION.

**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.