

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 3H30-3-U6

NAME: HYDROGEN FLUORIDE/MELAMINE (80% HF)

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

CAS NUMBER: 123334-03-2

MOLECULAR FORMULA: C<sub>3</sub>H<sub>7</sub>FN<sub>6</sub> MOLECULAR WEIGHT: 146.13

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

LABEL PRECAUTIONARY STATEMENTS

HIGHLY TOXIC.

TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

CORROSIVE.

CAUSES BURNS.

MAY CAUSE CANCER.

## 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 REMOVE CONTAMINATED CLOTHING. 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 -----

#### CONDITIONS OF FLAMMABILITY

WATER HYDROLYZES MATERIAL LIBERATING ACIDIC GAS WHICH IN CONTACT WITH METAL SURFACES CAN GENERATE FLAMMABLE AND/OR EXPLOSIVE HYDROGEN GAS. FLASH POINT

NOT ESTABLISED

**EXTINGUISHING MEDIA** 

SUITABLE: CARBON DIOXIDE, DRY CHEMICAL POWDER, OR APPROPRIATE FOAM. UNSUITABLE: DO NOT USE WATER

**FIREFIGHTING** 

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. SPECIFIC HAZARD(S): EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

EXPOSURE HAZARD(S)

MATERIAL: POISON. CORROSIVE.

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

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

ABSORB ON INERT MATERIAL, COLLECT IN APPROPRIATE CONTAINER AND HOLD FOR APPROPRIATE WASTE DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

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

## **HANDLING**

USER EXPOSURE: DO NOT BREATHE VAPOR. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING.

**STORAGE** 

SUITABLE: KEEP TIGHTLY CLOSED, STORE IN A COOL DRY PLACE.

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

#### **ENGINEERING CONTROLS**

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. PERSONAL PROTECTIVE EOUIPMENT

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. FACE SHIELD.

GENERAL HYGIENE MEASURES

WASH THOROUGHLY AFTER HANDLING.

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

APPEARANCE LIQUID PHYSICAL PROPERTIES NONE ESTABLISHED

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

#### **STABILITY**

CONDITIONS OF INSTABILTIY: HEAT. LIGHT.

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS

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

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

## ROUTE OF EXPOSURE

MULTIPLE ROUTES: MAY BE FATAL IF INHALED, SWALLOWED, OR ABSORBED THROUGH SKIN. CAUSES BURNS.

#### SIGNS AND SYMPTOMS OF EXPOSURE

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

SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHIORTNESS OF BREATYH, 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 DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

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

DOT

PROPER SHIPPING NAME: HYDROFLUORIC ACID (WITH MORE THAN 60% STREGNTH).

UN#: 1790 CLASS: 8(6.1) PACKING GROUP I

HAZARD LABEL: CORROSIVE

HAZARD LABEL: TOXIC SUBSTANCES

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

EU ADDITIONAL CLASSIFICATION
SYMBOL OF DANGER: T+, C
INDICATION OF DANGER: HIGHLY TOXIC, CORROSIVE.
RISK PHRASES
R: 26/27/28, 34, 45
SAFETY PHRASES
S: 23, 24/25, 26, 27, 36/37/39, 43, 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.