

# **Material Safety Data Sheet**

Transportation Emergency: 1-800-451-8346

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

CATALOG #: 3H32-3-53

NAME: HYDROGEN FLUORIDE 2,4,6-TRIMETHYLPYRIDINE

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

COMPOSITION:

HYDROGEN FLUORIDE ~70% 2,4,6-TRIMETHYLPYRIDINE ~30%

CAS #:

MIXTURE [32001-55-1] HYDROGEN FLUORIDE [7664-39-3] 2,4,6-TRIMETHYLPYRIDINE [108-75-8]

MF:

HYDROGEN FLUORIDE 2,4,6-TRIMETHYLPYRIDINE HF = 20.01  $C_8H_{11}N = 121.18$ 

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

LABEL PRECAUTIONARY STATEMENTS

HIGHLY TOXIC BY INHALATION, HIGHLY TOXIC BY INGESTION, HIGHLY TOXIC BY SKIN ABSORPTION, CORROSIVE

HMIS CLASSIFICATION

HEALTH HAZARD: 2

FLAMMABILITY: 2

PHYSICAL HAZARDS: 0

SEE SECTION 11 FOR ADDITIONAL INFORMATION

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

GENERAL ADVICE

CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. 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 -----

#### EXTINGUISHING MEDIA

USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO

PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

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

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

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS, AND

HEAVY RUBBER GLOVES. AVOID BREATHING DUST OR FUMES.

## METHODS FOR CLEANING UP

COVER WITH INERT ABSORBENT MATERIAL, SWEEP UP AND DISPOSE OF AS HAZARDOUS WASTE. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

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

#### HANDLING

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

KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE.

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

## **ENGINEERING CONTROLS**

MECHANICAL EXHAUST REQUIRED. SAFETY SHOWER AND EYE BATH. 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.

## GENERAL HYGIENE MEASURES

WASH THOROUGHLY AFTER HANDLING.

#### EXPOSURE LIMITS, HYDROFLUORIC ACID

<b>COUNTRY</b>	SOURCE	<u>TYPE</u>	<u>VALUE</u>
USA	ACGIH	TWA	0.5 ppm
USA	ACGIH	C	2 ppm
USA	OSHA	TWA	3 ppm
USA	OSHA	STEL	6 ppm
USA	OSHA	TWA	$2.5 \text{ mg/m}^3$

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

APPEARANCE AND ODOR

**SOLID** 

PHYSICAL PROPERTIES

MELTING POINT: 90 °C

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

#### MATERIALS TO AVOID

STRONG BASES, ALKALI METALS, STRONG OXIDIZING AGENTS, METALS, STRONG ACIDS, REACTS VIOLENTLY WITH WATER.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN FLUORIDE

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

POTENTIAL HEALTH EFFECTS

**INHALATION** 

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

**SKIN** 

CAUSES SKIN BURNS. MAY BE FATAL IF ABSORBED THROUGH SKIN.

**EYES** 

CAUSES EYE BURNS.

**INGESTION** 

MAY BE FATAL IF SWALLOWED. CAUSES BURNS.

TARGET ORGANS

LIVER, KIDNEY, BONE MARROW, NERVES.

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

DATA NOT YET AVAILABLE.

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

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 SOLID, ACIDIC, ORGANIC, NOS.

UN#: 3261 CLASS: 8

PACKING GROUP: PACKING GROUP II HAZARD LABEL: CORROSIVE SOLID

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

EU DIRECTIVES CLASSIFICATION

HAZARD SYMBOL(S): T+, C

HAZARD INDICATION: TOXIC, CORROSIVE

RISK PHRASE(S)

R26/27/28 – VERY TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED R35 - CAUSES SEVERE BURNS

SAFETY PHRASE(S)

S26 - IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE

S28 - AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER S36/37/39 - WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION S45 - IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW LABEL WHERE POSSIBLE)

US CLASSIFICATION AND LABEL TEXT

TARGET ORGAN EFFECT, HIGHLY TOXIC BY INHALATION, HIGHLY TOXIC BY INGESTION, HIGHLY TOXIC BY SKIN ABSORPTION. CORROSIVE.

UNITED STATES REGULATORY INFORMATION

TSCA INVENTORY ITEM: NO

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

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