# **Matrix Scientific**

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## SAFETY DATA SHEET

Transportation Emergency: 3E Co. (5025) 800-451-8346

## 1. Product Identification

Name Hydrogen fluoride-pyridine (70% HF)

Synonym Olah's Reagent

Catalog Number 003543

CAS Registry Number [32001-55-1] (mixture) Hydrogen fluoride [7664-39-3]

Pyridine [110-86-1]

Company Matrix Scientific

Physical Address 131 Pontiac Business Center Drive

Elgin, SC 29045

USA

**Telephone/Fax** (803)788-9494/(803)788-9419

## 2. Composition, Information or Ingredients

**Hazardous Ingredients** Hydrogen fluoride-pyridine (70% HF)

Hydrogen fluoride 70% Pvridine 30%

GHS label elements, including precautionary statements

Pictogram

Signal word DANGER

Hazard statement(s)

H301 Toxic if swallowed H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage H335 May cause respiratory irritation

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/ P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do - continue rinsing.

P402+P404 Store in a dry place. Store in a closed container.
P411+P235 Store at temperatures not exceeding 8°C . Keep cool.
P501 Dispose of contents/container to ... [... in accordance with

local/regional/national/international regulation (to be specified)].

#### 3. Hazard Identification

#### Corrosive

## **Highly Toxic**

#### **Moisture Sensitive**

Highly toxic by inhalation, ingestion and skin absorption. Carcinogen

Avoid prolonged exposure. Do Not breathe vapor.

Use caution when handling.

Exposure to any chemical should be limited.

To the best of our knowledge, the health hazards of this product have not been fully investigated.

This product is provided solely for the purpose of research and development.

## 4. First Aid Measures

Show this safety data sheet to the doctor in attendance

**Eye Contact:** Check for and remove any contact lenses. Immediately flush eyes with

clean, running water for at least 15 minutes while keeping eyes open. Cool

water may be used. Seek medical attention.

**Skin Contact:** After contact with skin, wash with generous quantities of running water.

Gently and thoroughly wash affected area with running water and nonabrasive soap. Cool water may be used. Cover the affected area with emollient. Seek medical attention. Wash any contaminated clothing prior to

reusing.

**Inhalation:** Remove the victim from the source of exposure to fresh, uncontaminated

air. If victim's breathing is difficult, administer oxygen. If not breathing, give

artificial respiration. Seek medical attention.

**Ingestion:** If swallowed, wash out mouth with water provided person is conscious.

Call a physician.

## 5. Fire-Fighting Measures

**Extinguishing media:** Carbon dioxide, dry chemical powder, alcohol- resistant or polymer foam,

water spray.

Special fire fighting

procedures:

Wear self-contained breathing apparatus and protective clothing to prevent

contact with skin and eyes.

Unusual fire and explosion hazards/

decomposition of

**product:** Emits toxic fumes under fire conditions.

## 6. Accidental Release Measures

Steps to be taken if material is spilled or otherwise released into the environment - Wear Appropriate respirator, impervious boots and heavy rubber (or otherwise impervious) gloves. Scoop up solid material or absorb liquid material and place into appropriate container. Ventilate area and wash affected spill area after pickup is complete. Wash skin immediately with plenty of water. Place solid or absorbed material into containers and close for disposal.

## 7. Handling and Storage

#### Corrosive

#### Toxic

Do not breath dust or vapor.

Have safety shower and eye wash available.

Do not get in eyes, on skin or on clothing.

Keep container tightly closed.

Store in a cool, dry, well-ventilated place.

Ensure adequate ventilation during use.

Use only in a chemical fume hood.

## 8. Exposure Controls and Personal Protection

Mechanical exhaust required. Safety shower and eye bath.

Wear full-face, NIOSH (USA) approved respirator.

Wear chemical-resistant gloves.

Wear protective clothing and chemical resistant boots.

Ensure ventilation during use.

After contact with skin, wash immediately.

Exposure limits:

Hydrogen fluoride - OSHA STEL 6 ppm

OSHA TWA 2.5 mg/m3

Pyridine - OSHA TWA 5 ppm; 15 mg/m3

## 9. Physical and Chemical Properties

Appearance: Liquid
Molecular Formula: C5H6FN
Molecular Weight: 99.11

**Density:** 1.140 g/cm3

### 10. Stability and Reactivity

**Incompatibilities:** Strong oxidizing agents, metals

Reacts violently with water Strong acids and bases

**Hazard Decomposition Products** 

**Carbon** carbon monoxide

carbon dioxide

Fluorine hydrogen fluoride

Nitrogen

oxides of nitrogen

## 11. Toxicological Information

#### Acute effects:

Irritant, harmful

May be fatal by ingestion and inhalation.

Material is irritating to mucous membranes and upper respiratory tract.

To the best of our knowledge, the toxicological properties of this product have not been fully investigated or determined.

## 12. Ecological Information

**Mobility:** Data not known

**Persistence and** 

degradability:No data availableCumulative potential:No data availableOther adverse effects:No data available

## 13. Disposal Considerations

Absent other actions demanded by federal or local regulations - Dissolve or mix the material with a combustible solvent and burn in a requlated, chemical incinerator equipped with after burner and scrubber.

Observe all federal, state and local laws.

## 14. Transport Information

**Shipping Name** Hydrofluoric acid, more than 60% strength

Class / Sub-Class 8 / 6.1 UN Number UN1790

Packing Group
Inhalation Hazard Zone

## 15. Regulatory Information

Adhere to all Federal, State and local regulations.

## 16. Other Information

The information contained herein is accurate to the best of our knowledge, but is not meant to be complete and is included only as a guide. The end user is responsible for any damage resulting from handling or from contact with this product.