

SAFETY DATA SHEET

Revision Date 10-Feb-2015 Revision Number 1

1. Identification

Product Name Hydrogen fluoride-pyridine

Cat No.: AC180070000; AC180070100; AC180070500; AC180071000

Synonyms Pyridinium poly(hydrogen fluoride)

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Entity / Business Name
Fisher Scientific Acros Organics

Acros Organics One Reagent Lane

Fair Lawn, NJ 07410 Fair Lawn, NJ 07410 Tel: (201) 796-7100

Emergency Telephone Number

For information US call: 001-800-ACROS-01

/ Europe call: +32 14 57 52 11

Emergency Number **US:**001-201-796-7100 /

Europe: +32 14 57 52 99

CHEMTREC Tel. No.US:001-800-424-9300 /

Europe:001-703-527-3887

2. Hazard(s) identification

Classification

One Reagent Lane

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1

Label Elements

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Hydrogen fluoride-pyridine

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

Unknown Acute Toxicity

.? % of the mixture consists of ingredients of unknown toxicity.

3. Composition / information on ingredients

| Component | CAS-No | Weight % | | |
|-------------------------|------------|----------|--|--|
| Pyridine, hydrofluoride | 32001-55-1 | 65-70 | | |

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Inhalation Remove from exposure, lie down. Move to fresh air.

Ingestion Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink

plenty of water. If possible drink milk afterwards.

lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation

Notes to Physician Treat symptomatically

5. Fire-fighting measures

surrounding environment.

Unsuitable Extinguishing Media No information available

Flash Point Method -No information available

No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO2) Gaseous hydrogen fluoride (HF)

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

HealthFlammabilityInstabilityPhysical hazards300N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions See Section 12 for additional ecological information.

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, **Up** sawdust). Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist.

Use only in area provided with appropriate exhaust ventilation.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Corrosives

area.

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------------|----------------------------|---|------------|
| Pyridine, hydrofluoride | TWA: 2.5 mg/m ³ | (Vacated) TWA: 2.5 mg/m ³ | |
| | | (· · · · · · · · · · · · · · · · · · · | |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV | |
|-------------------------|----------------------------|----------------------------|----------------------------|--|
| Pyridine, hydrofluoride | TWA: 2.5 mg/m ³ | TWA: 2.5 mg/m ³ | TWA: 2.5 mg/m ³ | |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline

respirator in the positive pressure mode with emergency escape provisions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StateLiquidAppearanceBrownOdorOdorless

Odor ThresholdNo information availablepHNo information availableMelting Point/RangeNo data available

Boiling Point/Range No information available Flash Point No information available Evaporation Rate No information available Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure No information available
Vapor Density No information available
Relative Density No information available
Solubility No information available
Partition coefficient; n-octanol/water No data available

Autoignition Temperature

No information available

Decomposition Temperature

No information available

Viscosity

No information available
No information available

Molecular Formula C5 H6 F N Molecular Weight 99.11

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions. Moisture sensitive.

Conditions to AvoidTemperatures above .?1°C. Incompatible products. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Strong bases

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Gaseous hydrogen

fluoride (HF)

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Oral LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Vapor LC50

Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

 Irritation
 No information available

 Sensitization
 No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Hydrogen fluoride-pyridine

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|-------------------------|------------|------------|------------|------------|------------|------------|
| Pyridine, hydrofluoride | 32001-55-1 | Not listed |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability **Bioaccumulation/ Accumulation** No information available No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN1760 **UN-No Hazard Class** 8 **Packing Group** Ш

TDG

UN1760 UN-No **Hazard Class** 8 **Packing Group** Ш

UN-No

CORROSIVE LIQUID, N.O.S.* **Proper Shipping Name**

Hazard Class Packing Group Ш

IMDG/IMO

UN-No 1760

CORROSIVE LIQUID, N.O.S. **Proper Shipping Name**

Hazard Class Packing Group Ш

15. Regulatory information

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|-------------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Pyridine, hydrofluoride | Х | - | Х | 250-889-6 | - | | - | - | - | - | Х |

Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration

Not applicable

CERCLA

Not applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals

State Right-to-Know

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-------------------------|---------------|------------|--------------|----------|--------------|
| Pyridine, hydrofluoride | = | X | X | = | Х |

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class E Corrosive material



16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date 10-Feb-2015 Print Date 10-Feb-2015

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS