Safety Data Sheet

1. Identification of Substance/ Identification of Company

Product: PyOxim
Catalog #: CXZ075
CAS #: 153433-21-7
Chemical Formula: $C_{17}H_{29}F_6N_5O_3P_2$
Molecular Weight: 527.38
Synonyms: [Ethyl cyano(hydroxyimino)acetato-O^2]tri-1-pyrrolidinylphosphonium hexafluorophosphate

Relevant Identified Uses of the Substance or Mixture: Laboratory chemicals, Manufacture of substances

Supplier: AAPPTec, LLC
6309 Shepherdsville Road
Louisville, Kentucky USA
40228
Telephone: 502-968-2223
Fax: 502-968-3338

2. Hazards Identification

Classification of the substance or mixture: Not a hazardous substance or mixture
GHS Label Elements, Including Precautionary Statements: Not a hazardous substance or mixture
Hazards Not Otherwise Classified (HNOC) or not covered by GHS: None

3. Composition/ information on ingredients

Substance/preparation: Substance
Chemical Name: [Ethyl cyano(hydroxyimino)acetato-O^2]tri-1-pyrrolidinylphosphonium hexafluorophosphate
CAS #: 153433-21-7

No ingredients are hazardous according to OSHA criteria.
No components need to be disclosed according to the applicable regulations

4. First Aid Measures

Description of First Aid Measures

General Advice: Hydrofluoric (HF) acid burns require immediate and specialized first aid and medical treatment. Symptoms may be delayed up to 24 hours depending on the concentration of HF. After decontamination with water, further damage can occur due to penetration/absorption of the fluoride ion. Treatment should be directed toward binding the fluoride ion as well as the effects of exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel repeated until burning ceases. More serious skin exposures may require subcutaneous calcium gluconate except for digital areas unless the physician is experienced in this technique, due to the potential for tissue injury from increased

pressure. Absorption can readily occur through the subungual areas and should be considered when undergoing decontamination. Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets or Milk of Magnesia to conscious victims. Conditions such as hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored for, since they can occur after exposure.

Inhalation: If inhaled, move person to fresh air. If not breathing, give artificial respiration.

Skin Contact: Wash off with soap and plenty of water

Eye Contact: Flush eyes with water as a precaution.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Important Symptoms and Effects, Both Acute and Delayed

The most important known symptoms and effects are described in Section 2 and/or Section 11

Aggravating conditions: Repeated or prolonged exposure is not known to aggravate medical condition.

5. Fire-fighting Measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous thermal decomposition products: Oxides of carbon (CO, CO_2), oxides of nitrogen (NOx).oxides of phosphorus, hydrogen fluoride

Advice for firefighters: Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) if necessary

Other Information: No data available

6. Accidental Release Measures

Personal Precautions: Avoid dust formation. Avoid breathing dust, vapors, mist or gas. For personal protection see Section 8

Environmental Precautions: Do not allow product to enter drains.

Methods and materials for containment and cleaning up: Sweep up and shovel. Keep in suitable containers for disposal.

Reference to Other Sections: For disposal see Section 13

7. Handling and Storage

Precautions for Safe Handling: Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. For precautions see Section 2.

Conditions for Safe Storage: Keep container tightly closed in a dry well-ventilated area.
Recommended storage temperature: 2-8 °C
Risk of explosion if heated under confinement. Keep in a dry place.
Storage Class: (TRGS 510):13: Non Combustible Solids

Specific End Uses: Apart from the uses mentioned in Section 1, no other specific uses are stipulated.

8. Exposure Controls/Personal Protection

Control Parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure Controls

Engineering Controls

General industrial hygiene practice

Personal Protective Equipment

Eye/Face Protection: Tightly fitting safety goggles. Face shield (8 inch minimum) Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Do not allow product to enter drains.

9. Physical and Chemical Properties

Appearance: White crystalline powder
Odor: No data available
Odor Threshold: No data available
pH: No data available
Melting Point: 167 – 172 ˚C (333 – 342 ˚F)
Boiling Point: No data available
Flash Point: No data available
Evaporation Rate: No data available
Flammability (solid, gas): No data available
Upper/Lower Flammability or Explosive Limits: No data available
Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: No data available
Water Solubility: No data available
Partition Coefficient n-Octanol/Water: No data available
Auto-Ignition Temperature: No data available

Decomposition Temperature: No data available
Viscosity: No data available
Explosive Properties: No data available
Oxidizing Properties: No data available

Other Safety Information:
Solubility in Other Solvents: Dimethylformamide (DMF) - soluble

10. Stability and Reactivity

Reactivity: No data available
Chemical Stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: No data available
Conditions to Avoid: Direct sources of heat
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: Hazardous thermal decomposition products formed under fire conditions: Oxides of carbon (CO, CO_2), oxides of nitrogen (NOx).oxides of phosphorus, hydrogen fluoride

In event of fire: See Section 5

11. Toxicological Information

Toxicological Effects
Acute Toxicology: No data available
Inhalation – No data available
Dermal – No data available
Skin Corrosion/Irritation: No data available
Serious Eye Damage/ Eye Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

Reproductive Toxicity: No data available
Specific Organ Toxicity – Single Exposure: No data available
Specific Organ Toxicity – Repeated Exposure: No data available
Aspiration Hazard: No data available
Additional Information
RTECS: Not available
Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

12. Ecological Information

Toxicity: No data available
Persistence and Degradation: No data available
Bioaccumulative Potential: No data available
. **Mobility in Soil:** No data available
Results of PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Other Adverse Effects: No data available

13. Disposal Considerations

Waste Treatment Methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated Packaging: Dispose of as unused product

14. Transportation

DOT(US): Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

15. Regulatory Information

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: No SARA hazards

State Regulations:

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right To Know Act.

Pennsylvania Right To Know Components

[Ethyl cyano(hydroxyimino)acetato-O^2]tri-1-pyrrolidinylphosphonium hexafluorophosphate
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New Jersey Right To Know Components

[Ethyl cyano(hydroxyimino)acetato-O^2]tri-1-pyrrolidinylphosphonium hexafluorophosphate
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California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other Information

Hazardous Material Information System (U.S.A.)

Health
Flammability
Physical Hazard
Chronic Health Hazard

Notice to Reader

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