

# HEDP Potassium Salt, Hydroxyethylidene Diphosphonic Acid - Potassium Salt (HEDP.Kx) SDS, Safety Data Sheet

# **1. Product Identification**

Synonyms: (Hydroxy-1, ethane-diphosphonic acid, 2K Salt; dipotassium 1-hydroxyethylidene diphosphonate; DIPOTASSIUM (1-HYDROXYETHYLIDENE) BIS-PHOSPHONIC ACID; 1-Hydroxyethylidene-1,1'-diphosphonate,dipotassium salt;(1-hydroxyethylidene) bis-phosphonic acid potassium salt; (1-hydroxyethylidene) bis-phosphonic acid potassium salt;1-Hydroxyethylidenebis(phosphonic acid) dipotassium salt; dipotassium dihydrogen (1-hydroxyethylidene)bisphosphonate; Phosphonic acid, (1-hydroxyethylidene)bis-, dipotassium salt, HEDP potassium salt CAS No.: 21089-06-5 for x=2 Einecs: 244-210-2 Chemical Formula: C2H(8-x)O7P2Kx (x=2)

<u>SUPPLIER</u> Company: Finoric LLC Address: 8115 Loop 540, Beasley, Texas, 77417 USA

## In case of emergency contact:

InfoTrac US: 1-800-535-5053 International: 352-323-3500

# 2. Hazards Identification

# GHS, Globally Harmonized System Classification in accordance with 29 CFR 1910

GHS Label Elements NONE

## Signal Word: None

## Hazards not otherwise classified (HNOC):

May cause mild skin irritation. May causes eye irritation. May be harmful if inhaled. May cause respiratory irritation.

## **Precautionary statements:**

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position



comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313: If eye irritation persists get medical advice/attention.

This material is not classed as hazardous by OSHA Hazard Communication Standard (29 CFR 1910.1200). The material will not cause serious hazard if handled carefully.

## **3.** Composition/Information on Ingredients

Ingredient: HEDP.Kx 10-50% in water CAS No.: 21089-06-5 for x=2

## 4. First Aid Measures

## Always seek medical attention after first aid measures are provided.

<u>Inhalation</u>: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

<u>Ingestion</u>: Do not induce vomiting. Get medical attention immediately.. Never give anything by mouth to an unconscious person. Get medical attention immediately.

<u>Skin</u>: Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if found any serious contact complication.

<u>Eye Contact</u>: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Do not allow the victim to rub eyes. Get medical attention if found any serious contact complication.

Note to physician: Treat symptomatically.

# **5. Fire Fighting Measures**

<u>Fire</u>: 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid - Potassium Salt or HEDP potassium salt is not a fire hazard.

<u>Hazardous Decomposition Products</u>: Carbon dioxide, Carbon monoxide, Phorous oxide, Phosphine and Fumes.

<u>Fire Extinguishing Media</u>: Use any means suitable for extinguishing surrounding fire over HEDP.Kx. Water spray may be used to keep fire exposed containers cool. Dry chemicals, carbon dioxide, water, foam are ok.

<u>Special Information</u>: In the event of a fire over HEDP potassium salt, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipments. <u>Spills</u>: Mop up and containerize for reclamation or disposal. Do not release 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid - Potassium Salt or HEDP.Kx in to sewer.



# 7. Handling and Storage

Keep HEDP.Kx in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat and incompatibilities. Do not ingest or inhale and avoid contact. Containers of 1-Hydroxyethylidene-1,1-Diphosphonic Acid - Potassium Salt or HEDP potassium salt may be hazardous when empty since they retain product residues; observe all warnings and precautions listed for the product. Store above the freezing temperature - 0C.

## 8. Exposure Controls/Personal Protection

Exposure Limits: No occupational exposure limits established.

<u>Ventilation</u>: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

<u>Eye Protection:</u> Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

<u>Clothing</u>: Wear appropriate chemical resistant clothing.

Protective Material Type: Rubber

<u>Respirator</u>: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Use any mist and fume respirator.

## 9. Physical and Chemical Properties

Physical State: 1-Hydroxyethylidene-1,1-Diphosphonic Acid - Potassium Salt or HEDP.Kx is liquid Appearance: Clear, colorless to pale straw Odor: Odorless to mild order feeling. <u>Molecular Formula</u>: C2H(8-x)O7P2Kx (x=2) Boiling Point: > 220 F <u>Melting point</u>: < 1C, < 34F <u>Specific gravity</u>: 1.15 - 1.45 <u>pH</u>:6 - 8 <u>Vapor Pressure</u>: Unknown <u>Vapor Density</u>: NA <u>Decomposition Temperature</u>: NA <u>Water solubility</u>: Miscible

Viscosity: NA

# **10. Stability and Reactivity**

<u>Reactivity</u>: 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid - Potassium Salt or HEDP.Kx is stable at normal temperature and pressure. <u>Conditions to avoid</u>: Avoid heat, flames, sparks and other sources of ignition. <u>Incompatibilities</u>: Acids, Bases, amines, metals, reducing agents, oxidizing materials. Metals: May be corrosive

Hazardous Decomposition: Thermal decomposition products: phosphine, inorganic Acid -



Potassium Salts, oxides of phosphorus. <u>Polymerization</u>: Will not occur.

# **11. Toxicological Information**

2850 mg/kg oral-rat LD50 Local effects: Irritant skin, eye corrosive, inhalation ingestion. Toxicity: Moderately toxic by ingestion.

## **12. Ecological Information**

HEDP.Kx is inherently biodegradable. It is known to have no-significant hazard. <u>Environmental Toxicity</u>: NA <u>Environmental fate</u>: Not expected to bio-accumulate.

## **13. Disposal Considerations**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of 1-Hydroxyethylidene-1,1-Diphosphonic Acid - Potassium Salt or HEDP.Kx container and unused contents in accordance with federal, state and local requirements.

# **14. Transport Information**

<u>DOT</u>: Not Regulated <u>IMO</u>: Not Regulated <u>IATA</u>: Not Regulated <u>AFI</u>: Not Regulated

## **15. Regulatory Information**

TSCA Status: Y TSCA 12(b) export notification: Not listed CERCLA Section 103 (40 CFR 302.4): N SARA Section 302 (40 CFR 355.30): N TPQ SARA Section 304 (40 CFR 355.40): N RQ SARA Section 313 (40 CFR 372.65): N California Prop 65 Status: N SARA Acute Hazard: N SARA Chronic Hazard: N SARA Fire Hazard: N SARA Reactivity Hazard: N SARA Sudden Release Hazard: N WHMIS Classification: N



<u>HMIS (Perceived)</u>: Health:1; Fire: 0; Physical Hazard: 0 <u>NFPA (Perceived)</u>: Health:1; Fire: 0; Reactivity: 0

Keep 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid - Potassium Salt or HEDP.Kx out of reach of children. Keep away from food, drink and animal feeding stuffs.

# Section 16 - Additional Information

# Prepared by AJK on 6 November 2015 Last Updated by \_\_\_\_\_ on: 19 February 2020

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