1. PRODUCT IDENTIFICATION

Product Name: METAL OUT PLUS

Synonym(s): HEDP; 1-Hydroxyethylidene-1, 1-diphosphonic acid

Recommended Uses: Sequestering Agent

SDS Reference: 36

Company Information: ALLCHEM PERFORMANCE PRODUCTS, INC. Distributed By: WINDO

6010 NW FIRST PLACE 6934 EAST FIRST AVENUE SUITE 101

GAINESVILLE, FL 32607 SCOTTSDALE AZ 85251

Tel: 352-378-9696

24 HOUR EMERGENCY NUMBER: INFOTRAC (TRANSPORTATION): 1-800-535-5053

2. HAZARD(S) IDENTIFICATION

Classification: CORROSIVE

HARMFUL IF SWALLOWED

TARGET ORGAN TOXICITY (SINGLE)

Signal Word: DANGER

Hazard Statements: HEALTH HAZARDS:

Eye Damage - Causes serious eye damage - Category 1 - H318

Skin Irritation - Causes severe skin burns and eye damage - Category 1 - H314

Acute Oral Toxicity - Harmful if swallowed - H302

Specific target organ - single exposure - May cause damage to (kidney, liver, spleen) - Category 2 - H371

PHYSICAL HAZARDS: Corrosive to many metals

Precautionary Corrosive. Causes severe skin burns and eye damage. May cause damage to kidney, liver and/or spleen.

Statements: Wear protective gloves, eye protection and face protection when handling this product. Do not breathe

vapors/gas/mist or spray. Harmful if swallowed. Wash hands thoroughly with soap and water after

handling. Remove contaminated clothing and wash before reuse.

Do not store product in mild steel, carbon steel, aluminum or other metals.

Eye Contact: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do -

continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Wash with plenty of soap and water. Call a physician if irritation persists. Inhalation: Material is irritating to mucous membranes and upper respiratory tract.

Ingestion: Corrosive to mouth, esophagus and stomach. Harmful if swallowed.

3. COMPOSITION PERCENT % CAS #

Chemical Name: 1-Hydroxyethylidene-1, 1-diphosphonic acid 28 - 30 2809-21-4 Phosphorous Acid 0 - 2 10294-56-1

If In Eyes: Immediately flush eyes with large amounts of water for at least 15 minutes. If easy to do, remove any

contact lenses. Get immediate medical attention.

If on Skin or Clothing: Immediate first aid is not likely to be required. Wash with large amounts of water. If irritation persists, seek

medical attention.

If Inhaled: Immediate first aid is not likely to be required. If symptoms occur, remove to fresh air.

If Swallowed: Immediate first aid is not likely to be required. A physician or Poison Control Center can be contacted for

advice.

Note: Have the product container or label with you when calling a poison control center or doctor, or going for

treatment.

5. FIREFIGHTING MEASURES

Suitable / Unsuitable Recommended extinguishing media; water spray

Extinguishing Media:

Specific Hazards from Hazardous decomposition: Carbon Monoxide, Carbon Dioxide

Chemical:

4. FIRST AID

Special Protective

Firefighters, and other exposed, wear self contained breathing apparatus. Wear suitable protective clothing,

Equipment:

gloves and eye/face protection.

Other Information:

No data available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes and clothing. See Section 8 for Personal Protective Equipment.

Methods and Materials

Warn everybody in sewers, basements and workpits of danger of corrosive hazard.

for cleanup:

Large Quantities: Prevent liquid entering basements and workpits. Keep out of drains and watercourses. Contain liquid spillage with sandbags or other means to prevent entry into drains Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled

clothing and wash thoroughly before reuse.

Large Spillage: Absorb in earth or sand. Sweep up into containers for disposal. Do not use metal containers

for spilled material. Flush spill area with water.

Small Spillage: Treat with hydrated lime or soda ash. Wash away small spills with plenty of water.

7. HANDLING AND STORAGE

Handling: Keep container closed. Open and handle containers with care. Empty product containers may contain

residue. Do not reuse empty containers without commercial cleaning or reconditioning.

Storage: Store in a cool, well ventilated place away from incompatible materials. Do not allow product to freeze.

Incompatible material: Attacks many metals, corrosive aluminum and mild steel.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS

OSHA permissible

exposure limit:

No workplace exposure limits have been established for this product.

Appropriate Engineering

Controls:

Provide natural or mechanical ventilation to minimize exposure. If practical, use local exhaust ventilation at

sources of air contamination such as processing equipment.

Individual Protection

Measures:

Respiratory Protection - Avoid breathing vapor or mist. Use approved respiratory protection equipment when airborne exposure is excessive. If used, full face piece replaces the need for face shield and/or chemical goggles. Consult the respirator manufacturer to determine the appropriate type of equipment for

a given application. Observe respirator use limitations specified by the manufacturer.

Eyes Protection - Wear chemical goggles. Have eye wash facilities immediately available at any location

where eye contact can occur.

Skin Protection - Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wash thoroughly after handling. Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Consult the glove/clothing manufacturer to determine

the appropriate type glove/clothing for a given application.

Other Work Practices - Use good personal hygiene practices. Wash hands before eating, drinking, smoking

or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

pH: <2

Appearance: Colorless to pale yellow liquid. Flammability (solid/gas): Not Applicable

Odor: Mild odor Upper/lower Flammability or Not Applicable

Exposure limits:

Odor Threshold: No data available Vapor Pressure: No data available

Vapor Density: No data available

Melting No data available Density: 9.68 lbs/gal Point/Freezing Point:

Solubility(ies): Soluble in water

Initial Boiling No data available Partition Coefficient: n-octanol/water: No data available

Auto-ignition Temperature: Not Applicable

Flash Point: Nonflammable Decomposition Temperature: No data available

Evaporation Rate: No data available Viscosity: No data available

10. STABILITY AND REACTIVITY

Point/Boiling Range:

Stability/Reactivity: Material is stable under normal conditions. Substantial heat is evolved when mixed with alkali.

Possibilities of Hazardous Polymerization: Will Not Occur.

Hazardous Reactions:

Conditions to Avoid: Contact with common metals produces flammable hydrogen gas.

Incompatible Materials: Strong oxidizing agents and strong bases.

Attacks many metals. Corrosive to aluminum and mild steel.

Hazardous Decomposition

Materials:

Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

COMPONENT TOXICITY: Acute Toxicity:

1-Hydroxyethylidene-1,1-diphosphonic acid:

Oral LD50: 2400 mg/kg Rat Dermal LD50: 10000 mg/kg Rabbit

Acute Toxicity Estimates (ATE):

Skin Corrosion - Category 2 - Causes skin irritation

Serious Eye Damage - Category 1 - Causes serious eye damage.

No other toxicity data is available.

No data available. Chronic Toxicity: Reproductive Toxicity: No data available.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA,

NTP or EPA.

Mutagenicity: No data available.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: (Based upon 60% HEDP)

> Bluegill - 96 h LC50: 868 mg/l Rainbow trout - 96 h LC50: 368 mg/l Daphnia Magna - 48 h EC50: 527 mg/l

Algae: 96h EC50: 3 mg/l (Algae growth inhibition is due to the ability of HEDP to complex materials and not

to toxicity per se.)

No data available. Avian Toxicity: **Environmental Hazards:** No data available.

13. DISPOSAL CONSIDERATIONS

Disposal: Observe all federal, state and local regulations when disposing of this product/container. Reference

guidelines under 40 CFR Parts 261.

Empty containers may retain product residue. Empty drums should be completely drained, properly bunged

and promptly returned to drum reconditioner, or properly disposed of.

14. TRANSPORATION INFORMATION

Package exceptions may be applicable. Refer to the appropriate IMDG, IATA and/or 49 CFR regulations accordingly.

DOT: UN3265, Corrosive liquid, acidic, organic, n.o.s. (1-Hydroxyethylidene-1,1-diphosphonic acid), 8, PG II

15. REGULATORY INFORMATION

TSCA: USA: Reported in the EPA TSCA Inventory. Acute Health Hazard / Chronic Health Hazard SARA (311, 312):

SARA 313: None of the ingredients are listed. Right To Know Hazardous California Proposition 65: not listed. Substance List: New Jersey - Phosphorous Acid >1%

Waste Classification: No data available.

Workplace This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200). Classification:

CERCLA Reportable

Not applicable.

Quantity:

16. OTHER INFORMATION

ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL. Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed in Section 15 of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements. The information in this SDS was obtained from sources, which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

HMIS Rating: Health: 3 NFPA Rating: Health: 3

Flammability: 0 Flammability: 0 Reactivity: 1 Reactivity: 1

Special Hazard Warning: Not applicable

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