Date: 08/11/2015
Revision: 00

Safety Data Sheet
Metal Eliminator

Section 1: Identification

Product Identifier: Metal Eliminator

Other Means of Identification:

Recommended Use: Reduces staining and calcium scale

Manufacturer's Name: Spec Chem Direct, Inc.

Corporate Address: 6506 S 209th St., Kent, WA, 98032

Manufacturer's Telephone: (253) 277-3143 (Monday-Friday, 8AM-5PM PT)

Emergency Phone Number: (253) 277-3143 (Monday-Friday, 8AM-5PM PT)

Section 2: Hazard(s) Identification

Hazard Classification: Causes Burns
Irritating to Respiratory System

Signal Word: DANGER

Hazard statement(s): Causes severe skin burns and eye damage
May cause respiratory irritation

Pictograms:

Precautionary Statement(s): Keep out of reach of children. Avoid breathing fumes, mists, vapors or spray. Do not get in eyes, on skin, or on clothing. Wash contacted areas thoroughly after handling. Use only outdoors or in a well ventilated area. Wear protective gloves, protective clothing and eye or face protection.

Hazards Not Otherwise Classified: N/A

Ingredient(s) With Unknown Toxicity: 0% of the mixture consists of ingredient(s) with unknown acute toxicity.

Section 3: Composition/Information on Ingredients

Ingredients	% by weight	CAS #
1-Hydroxyethylidene-1 1 Diphosphonic Acid	60%	2809-21-4
Phosphonic Acid	1% - 3%	13598-36-2
Other Non-Hazardous Ingredients	< 5%	Trade Secret
Water	to 100%	7732-18-5

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

Impurities and Stabilizing Additives, Which Are Themselves Classified and Which Contribute to the Classification of the Chemical: None

The Chemical Name and Concentration of All Ingredients Which Are Classified As Health Hazards and Are Present Above Their Cut-Off/Concentration Limits or Present a Health Risk Below the Cut-Off/Concentration Limits: None

Chemicals Where a Trade Secret Is Claimed: The product contains less than 5% of non-hazardous ingredients.

Section 4: First-Aid Measures

Inhalation: If irritation occurs, contact a Poisons Information Centre, or call a doctor. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. In severe cases, symptoms of pulmonary edema can be delayed up to 48 hours after exposure.

Skin: Quickly and gently, blot or brush away excess chemical. Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Flush contaminated area with lukewarm, gently flowing water for at least 20 - 30 minutes, by the clock. If irritation persists, continue flushing. DO NOT INTERRUPT FLUSHING. Seek urgent medical attention.

Eyes: Remove contact lenses (if applicable). Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 20 - 30 minutes while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. Take care not to rinse contaminated water into the unaffected eye or onto face. Obtain medical attention.

Ingestion: NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Obtain medical attention immediately.

Most Important Symptoms or Effects, and Any Symptoms That Are Acute or Delayed: N/A

Recommendations for Immediate Medical Care and Special Treatment Needed, When Necessary: N/A

Section 5: Fire-Fighting Measures

Suitable / Unsuitable Extinguishing Equipment: Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimize spillage entering drains or water courses.

Specific Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Special Protective Equipment or Precautions for Fire Fighters: There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.

Section 6: Accidental Release Measures

Personal Precautions: Refer to Section 8: Exposure Controls/Personal Protection and Section 7: Handling and Storage.

Emergency Procedures: None.

Methods and Materials for Containment and Cleanup: Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the corrosiveness of this product, special personal care should be taken in any cleanup operation. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Contaminated area may be neutralized by washing with weak or dilute alkali. Baking soda, washing soda and limestone are suitable. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7: Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if product gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing. Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Storage: Store in original container in a cool, dry and well ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimize contamination. Make sure that the product does not come into contact with bases, zinc, tin, aluminum and their alloys.

Section 8: Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs): Exposure limits have not been established for any of the significant ingredients in this product.

American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs): Exposure limits have not been established for any of the significant ingredients in this product.

Any Other Exposure Limit Used or Recommended: Not applicable.

Appropriate Engineering Controls: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapors and mists are minimized.

Individual Protection Measures (Personal Protective Equipment – PPE): Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used. Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. We suggest that protective clothing be made from the following materials: rubber, PVC. Usually, no respirator is necessary when using this product. Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

Section 9: Physical and Chemical Properties

Appearance: Clear yellow to amber colored liquid.

Odor: Pungent

Odor threshold: No data available.

pH: Corrosive. No specific data but below 2.0

Melting Point/Freezing Point: Approximately 0°C

Initial Boiling Point and Boiling Range: Approximately 100°C at 100kPa

Flash Point: Does not burn.

Evaporation Rate: No data available.

Flammability (Solid, Gas): Does not burn.

Upper/Lower Flammability or Explosive Limits: Does not burn.

Vapor Pressure: 2.37 kPa at 20°C (water vapor pressure).

Vapor Density: No data available.

Relative Density: 1.45 approx.

Solubility(ies): Completely soluble in water.

Partition Coefficient (n-octanol/water): No data available.

Auto-ignition Temperature: Product will not auto-ignite.

Decomposition Temperature: This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Viscosity: No data available.

NOTE: *These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.*

Section 10: Stability and Reactivity

Reactivity: Most strong acids react with inorganic and organic bases such as amines to form salts. They also react with many metals liberating hydrogen gas. These reactions are often rapid and sometimes liberate much heat. They can also decompose many organic materials such as esters, in a reaction called hydrolysis.

Chemical Stability: Material is stable under normal temperatures.

Possibility of Hazardous Reactions: Hazardous Polymerization will not occur.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep isolated from combustible materials.

Incompatible Materials: Bases, zinc, tin, aluminum and their alloys.

Hazardous Decomposition Products: This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of phosphorus and other phosphorus compounds. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Section 11: Toxicological Information

Likely Routes of Exposure (Inhalation, Ingestion, Skin and Eye Contact) and Delayed, Immediate, or Chronic Effects from Short- and Long-Term Exposure:

Inhalation
Short term exposure: Significant inhalation exposure is considered to be unlikely. Available data indicates that this product is not harmful. However product is an inhalation irritant. Symptoms may include headache, irritation of nose and throat and increased secretion of mucous in the nose and throat. Other symptoms may also become evident, but they should disappear after exposure has ceased.
Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:
Short term exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product is corrosive to the skin. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralized. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.
Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:
Short term exposure: Exposure via eyes is considered to be unlikely. This product is corrosive to eyes. It will cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is quickly treated, permanent blindness and facial scarring is likely.
Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:
Short term exposure: Significant oral exposure is considered to be unlikely. However, this product is corrosive to the gastrointestinal tract. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralized. Severity depends on concentration and duration of exposure.
Long Term exposure: No data for health effects associated with long term ingestion.

Numerical Measures of Toxicity:

Oral LD_{50}: Not available.
Dermal LD_{50}: Not available.
Inhalation LC_{50}: Not available.

Description of the symptoms: No data available.

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

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: Not available.

Persistence and Degradability: Not available.

Bioaccumulative Potential: Not available.

Mobility in Soil: Not available.

Other Adverse Effects: None known.

Section 13: Disposal Considerations (non-mandatory)

Appropriate Disposal Containers: Containers should be emptied as completely as practical before disposal. If possible, recycle containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site.

Recommended Appropriate Disposal Methods: Can be disposed of with household waste.

Physical and Chemical Properties That May Affect Disposal Activities: None.

Special Precautions for Landfills or Incineration Activities: None.

Do not dispose of into sewer or waterways.

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

To minimize exposure, refer to Section 8: Exposure Controls/Personal Protection

Section 14: Transport Information (non-mandatory)

UN Number: 1760.

UN Proper Shipping Name: 1760, CORROSIVE LIQUID, N.O.S.

Transport Hazard Class(es): Class 8, Corrosive Substances.

Packing Group Number, if Applicable: III.

Environmental Hazards (e.g., Marine pollutant (Yes/No)): Unknown.

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Unknown.

Special Precautions Which a User Needs to Be Aware of, or Needs to Comply With, in Connection With Transport or Conveyance Either Within or Outside Their Premises: Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidizing Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods).

Section 15: Regulatory Information (non-mandatory)

National and/or Regional Regulatory Information of the Chemical or Mixtures (Including Any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission Regulations):

TSCA: Unknown.

CERCLA Reportable Quantity (RQ): Unknown.

OSHA: Unknown.

EPA: Unknown.

SARA Section 302: Unknown.

SARA Section 311/312: Unknown.

SARA Section 313: Unknown.

California Proposition 65: Unknown.

Section 16: Other Information

REVISION INFORMATION:
SDS sections(s) changed since last revision of document:
00 08/11/2015 Original SDS Document

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