Safety Data Sheet

Prepared 04/01/2014 Revised 07/21/2015

DeLime Doctor

1. Chemical Product and Company Identification

Product Name: DeLime Doctor.

SDS#: 785
CAS#: Mixture.
CI#: Not available.

Chemical Formula: Mixture.

USE OF SUBSTANCE OR PREPARATION: Lime scale solvent concentrate.

Distributor:

Wayne Concept 5005 Speedway Drive Fort Wayne, IN 46825 Phone: 260-482-8615 Fax: 260-483-5598 INFOTRAC: 800-535-5053

2. Hazards Identification

Signal Word: DANGER





GHS Classifications: Acute Toxicity(oral); Cat. 4, Serious Eye Damage/Irritation; Cat. 1, Acute Toxicity(dermal); Cat. 5, Skin Corrosion/Irritation; Cat. 1B

Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, liver, skin, eyes, bone marrow. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

3. Composition and Information on Ingredients

Composition:

Name CAS # % by Weight EINECS NO. RISK PHRASE

Phosphoric Acid 7664-38-2 25-30 231-633-2 R34

Nonylphenol ethoxylate 9016-45-9 0-5

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an antibacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: of metals

Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:

Reacts with metals to liberate flammable hydrogen gas. Formation of flammable gases with aldehydes, cyanides, mercaptins, and sulfides.

Special Remarks on Explosion Hazards: Mixtures with nitromethane are explosive. Phosphoric Acid)

6. Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:

Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. Handling and Storage

Precautions:

Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, combustible materials, metals, alkalis. May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Phosphoric Acid

TWA: 1 STEL: 3 (mg/m3) from ACGIH (TLV) [United States]

TWA: 1 STEL: 3 (mg/m3) from OSHA (PEL) [United States] TWA:

1 STEL: 3 (mg/m3) from NIOSH

TWA: 1 STEL: 3 (mg/m3) [Mexico]Consult local authorities for acceptable exposure

limits.

9. Physical and Chemical Properties

Physical state and appearance: Colorless liquid without odor.

Odor: Odorless.
Taste: Acid.

Molecular Weight: Not applicable.

Color: Clear Colorless.

pH: 1.5 - 2

Boiling Point C: 300□F

Melting Point: Not determined. Freeze Point C: Not determined. Viscosity @ 25C: Not determined.

Specific Gravity: 1.175 Lb/gallon: 9.7814 Vapor Pressure: 20 mm Hg

Vapor Density: Not determined. (Air = 1)

Volatility: Not available. Odor

Threshold: Not available.
Solubility: Complete

10. Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, combustible materials, metals, alkalis.

Corrosivity:

Extremely corrosive in presence of copper, of stainless steel (304), of stainless steel (316).

Highly corrosive in presence of aluminum.

Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Reacts with metals to liberate flammable hydrogen gas.

Incompatible with sodium tetrahydroborate producing a violent exothermic reaction.

Heat generated with: alcohols, glycols, aldehydes, amides, amines, azo-compounds, carbamates, caustics, esters, ketones, phenols and cresols, organophosphates, epoxides, combustible materials, unsaturated halides, organic peroxides.

Formation of flammable gases, with aldehydes, cyanides, mercaptins, and sulfides.

Formation of toxic fumes with cyanides, fluorides, halogenated organics, sulfides, and organic peroxides.

Do not mix with solutions containing bleach or ammonia. Incompatible with nitromethane, chlorides + stainless steel. (Phosphoric Acid)

Special Remarks on Corrosivity: Minor

corrosive effect on bronze. Severe

corrosive effect on brass.

Corrosive to ferrous metals and alloys.

Polymerization: Will not occur.

11. Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD50): 1530 mg/kg [Rat]. Acute dermal toxicity (LD50): 2740 mg/kg [Rabbit].

Chronic Effects on Humans: May cause damage to the following organs: blood, liver, skin, eyes, bone marrow.

Other Toxic Effects on Humans:

Extremely hazardous in case of inhalation (lung corrosive).

Very hazardous in case of skin contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of eye contact corrosive).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

<u>Skin:</u> Corrosive and causes severe skin irritation and can cause severe skin burns. May affect behavior (somnolence or excitement) if absorbed through skin.

<u>Eyes:</u> Corrosive. Liquid or vapor causes severe eye irritation and can cause severe eye burns leading to permanent corneal damage or chemical conjunctivitis. Ingestion: May be harmful if swallowed. Causes irritation and burns of the gastrointestinal (digestive) tract. Causes severe pain, nausea, vomiting, diarrhea hematemesis, gastrointestinal hemorrhaging, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May affect behavior and urinary system, liver (hepatocellular damage, hepatic enzymes increased), blood (blood dyscrasia).

12. Ecological Information

Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport Information

Hazardous: Y

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (CONTAINS PHOSPHORIC ACID)

Freight Class: 55 Hazard Class: 8
PG: III UN/NA ID#: UN1760

15. Other Regulatory Information

Federal and State Regulations:

Connecticut hazardous material survey: Phosphoric Acid Illinois toxic substances disclosure to employee act: Phosphoric acid Illinois chemical safety act: Phosphoric acid New York release reporting list: Phosphoric acid Rhode Island RTK hazardous substances: Phosphoric acid Pennsylvania RTK: Phosphoric acid Minnesota: Phosphoric acid Massachusetts RTK: Phosphoric acid Massachusetts spill list: Phosphoric acid New Jersey: Phosphoric acid New Jersey spill list: Phosphoric acid Louisiana spill reporting: Phosphoric acid California Director's list of hazardous substances: Phosphoric acid TSCA 8(b) inventory: Phosphoric Acid; Water SARA 313 toxic chemical notification and release reporting: Phosphoric acid CERCLA: Hazardous substances: Phosphoric acid: 5000 lbs. (2268 kg)

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS E: Corrosive liquid.

DSCL (EEC):

R34-Causes burns.

 ${\tt S26-In}$ case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

\$45\$-In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):
Health Hazard: 2
Fire Hazard: 0
Reactivity: 0

Additional Information: B

B = Splash goggles, gloves (nitrile rubber recommended)

National Fire Protection Association (U.S.A.): Health:2

Flammability: 0
Reactivity: 0

Specific hazard: Protective

Equipment:

Gloves.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Face shield.

16. Other Information

Disclaimer:

The information is presented for your consideration in the belief that it is accurate and reliable; however, no warranty either expressed or implied is made and no freedom from liability from patents, trademarks or other limitations should be inferred.