

Crystal Clear SubLime Limescale Remover

MSDS Information

SECTION 1 - OSHA HAZARD CLASSIFICATIONS

Corrosive to eyes and skin. Avoid breathing vapors or spray mists.

SECTION 2 - HAZARDOUS COMPONENTS

Chemical Name CAS Number % by Weight TLV

1) 2-phosphono-1,2,4-butanetricarboxylic acid 37971-36-1 2-6 Not Avail.

2) Sodium Hydroxide 1310-73-2 0.165- 1.5 Not Avail.

3) Sodium Chloride 7647-14-5 0- 0.04 Not Avail.

The remainder of the components comprise proprietary information.

SECTION 3 - FIRST AID INFORMATION

Eye Exposure: Flush immediately with copious amounts of tap water or normal saline (minimum of 15 minutes). Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluation.

Skin Exposure: Wash exposed area with plenty of water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists consult a health care professional.

Inhalation: If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately.

Ingestion: DO NOT INDUCE VOMITING. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one (1) to two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product seek medical assistance immediately; take individual to nearest medical facility.

SECTION 4 - PRIMARY ROUTES OF EXPOSURE

1. Effects from Acute Exposure:

Eye Exposure: Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering, and itching.

Skin Exposure: Hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation: May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.

Ingestion: Ingestion is not expected to be a primary route of exposure.

2. Effects from Chronic Exposure:

The effects from chronic exposure to this product have not been fully evaluated.

SECTION 5 - Toxicological Information

Acute Effects:

Acute Oral (LD50) = >2000 mg/kg Rat

Irritant / Sensitization Effects:

Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering, and itching.

Hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.

Carcinogenic Potential:

Not tested by Winston Company. Not shown as a carcinogen by OSHA, IARC, or NTP.

Target Organs Effects:

May cause damage to the following organs: upper respiratory tract, skin, eyes.

Other Health Effects:

None known, not tested by Winston Company.

SECTION 6 - Environmental Toxicological Information

LC50 = >100 mg/l 48 hours Daphnia magna

LC50 = >1000 mg/l 24 hours Rainbow trout

SECTION 7 - Physical and Chemical Properties

Appearance: Light amber liquid

Odor: Slight.

Density: 1.02 g/cm³

Flash Point: CLOSED CUP: >100°C (212°F). (Pensky-Martens.)

Melting/Freezing Point: -17°C (1.4°F)

Boiling Point: Not available.

Solubility: Soluble in cold water. Soluble in hot water.

pH: 8.0 – 8.3

pH (100 ppm in water): Not available.

Vapor Pressure:..... Not available.

o/w Partition Coefficient: Not available.

Oxidizing/Reducing Properties: Not available.

Viscosity: Not available.

SECTION 8 - Fire and Explosion Information

Flammable Limits:..... Not available.

Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Special Firefighting Procedures: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 9 - Reactivity Information

Stability: Stable under normal conditions of use and storage.

Incompatibility: Steel, strong bases, strong oxidizers and strong alkali.

Hazardous Decomposition: Oxides of carbon, phosphoric acid and other unidentified combustible products.

SECTION - 10 Handling Precautions

Provide dilution ventilation to control vapor and/or mist level. When misting may occur in the work area, a NIOSH/MSHA approved respirator may be required. Use a respirator approved for the material and level of exposure. A comprehensive respiratory protection program is needed when respirators must be used.

Eye wash fountains in the work place are **STRONGLY** recommended.

Chemical resistant gloves, indirect ventilation goggles, body-protective clothing, and chemical resistant safety shoes are

required. If splashing can occur, a face shield is advisable.

SECTION 11 - Satisfactory Materials of Construction

This product has not been tested for Materials of Construction data. This Material Safety Data Sheet will be updated after this product is tested.

SECTION 12 - Spill, Leak, and Disposal Procedures

SPILL AND LEAK RESPONSE GUIDELINES:

Important: Before responding to a spill or leak of this product, review each section of this MSDS. Follow the recommendations given in the Handling Precautions sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of affected areas.

Emergency Response Assistance: Emergency technical assistance is available at any time from Winston Company, Inc., by calling (800) 331-9099.

Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the product's toxicological and chemical properties, and on the size and location of the spill or leak, assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. Winston Company, Inc. can be contacted for technical assistance. Determine if federal, state, and/or local release notification is required (see Regulatory Information section of this MSDS). Recover as much of the pure product as possible into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that can not readily be recovered as pure product. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident, may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer, insure that they do not come into contact with incompatible materials.

DISPOSAL GUIDELINES

Note: Follow federal, state, and local regulations governing the disposal of waste materials.

Contaminated Materials: Determine if waste containing this product can be handled by available industrial effluent system or other on-site waste management unit. If off-site management is required, contact a company experienced in industrial waste management.

SECTION 13 Transportation and Shipping Information:

DOT Shipping Information:

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (2-Phosphono-1,2, 4-butanetricarboxylic acid) , Class 8, UN 3265 , P.G. III , (ERG GUIDE 153). CORROSIVE LIQUID, SODIUM HYDROXIDE SOLUTION, Class 8, UN 1824 , P.G. II.

IMO/IMDG Shipping Information:

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (2-Phosphono-1,2, 4-butanetricarboxylic acid) , Class 8, UN 3265 , P.G. III , (EmS No. 8-15 , MFAG Table No. 760 , ERG Guide 153, HazMat Code 4931255)

IATA Shipping Information:

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (2-Phosphono-1,2, 4-butanetricarboxylic acid) , Class 8, UN 3265 , P.G. III , (ERG Guide 153, ERG Code 8L)

SECTION 14 - Regulatory Information

The following Regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

SARA (Superfund Amendments and Reauthorization Act)

SARA 302 Extremely Hazardous Substances List ...

No components of this product are listed.

SARA 312 Hazard Category ...

Immediate (Acute) Health Hazard

SARA 313 Toxic Chemicals List ...

No components of this product are present above the de minimus levels.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

No components of this product are present above the de minimum levels.

RCRA (Resource Conversation and Recovery Act) Listed Hazardous Waste

When disposed of, this product may be regulated as a RCRA Hazardous Waste with the characteristic of corrosivity due to the pH of the neat material.

CWA (Clean Water Act) Listed Substances

No components of this product are listed.

FDA (Food and Drug Administration)

This product is not approved for food contact uses.

TSCA (Toxic Substances Control Act) Applicability

All components are listed on the TSCA Inventory.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

This product is not a registered pesticide.

HMIS/NPCA Rating ... Health 3 Flammability 1 Reactivity 1

NFPA Ratings Health 3 Flammability 1 Reactivity 1

State Regulations

Various State Right To Know Acts ...

Non-proprietary hazardous chemicals are listed in Section 2 of this MSDS. Should you require further information on specific proprietary or inert ingredients please contact the Winston Company, Inc.

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Winston Company, Inc. has lead the biological water treatment industry for over 25 years now by offering only the highest quality bacteria and enzyme solutions for municipal wastewater treatment, sludge treatment and pond treatment.