



Descaler/Delimer

Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier used on the label : **Descaler/Delimer**

Other means of identification : 2181034

Recommended use of the chemical and restrictions on use:

Product for hospital and professional use only to remove lime and hard water deposits. Not for home use.

Name, address, and telephone number of the chemical manufacturer:

BELIMED INC.
 1535 Hobby Street, Suite 103
 N. Charleston, SC 29405 USA
 Telephone Number for Information : 1-800-451-4118

Emergency telephone number

CHEMTREC : 1-800-424-9300 (24/7, US and Canada)

SECTION 2: HAZARD IDENTIFICATION

Classification of the substance or mixture

Hazard Class	Hazard Category
SKIN CORROSION	: 1C
SERIOUS EYE DAMAGE	: 1

Signal word, hazard statement(s), symbol(s) and precautionary statement(s)

Signal word : WARNING

Hazard Statement(s) : Causes severe skin burns and eye damage.



Precautionary Statements

: Prevention
 Wear eye/face protection.
 Avoid breathing dust/fume/has/mist/vapors/spray.
 In case of inadequate ventilation, wear respiratory protection.

: Response
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Immediately contact physician or local poison control center.
 IF ON SKIN (on hair): Take off immediately all contaminated clothing. Wash with plenty of water/shower. Wash contaminated clothing before reuse.
 IF INHALED: Remove person from exposure area to fresh air and keep at rest in a position comfortable for breathing. Immediately contact physician or local poison control center.

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- Storage** : Store locked up.
- Disposal** : Dispose of contents/container to an approved waste disposal facility.
- Hazards not otherwise classified** : Do not mix with bleach or other chlorinated products, as this will cause chlorine gas to form.
- Percentage of ingredient(s) with unknown toxicity** : None known

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

The following chemicals are classified as health hazards in accordance with 29 CFR 1910.1200

Chemical Name	CAS Number (Unique Identifier)	Concentration	Classification §1910.1200
Phosphoric Acid	7664-38-2	10.0 - 20.0	Skin Corr. 1C, H314 Eye Dam. 1, H318 May be Corrosive to Metals, H290

SECTION 4: FIRST AID MEASURES

Description of necessary measures

Inhalation: Remove from exposure area to fresh air. Seek medical attention immediately.

Skin contact: Immediately wash off with plenty of water for at least 20 minutes while removing contaminated clothing. Use mild soap, if available. Wash clothes before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Eye contact: Immediately rinse with plenty of water, including under the eyelids, for at least 20 minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Get medical attention immediately.

Ingestion: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Inhalation: Corrosive. Burns in respiratory tract, shortness of breath.

Skin contact: Corrosive. Severe burns, redness.

Eye contact: Corrosive. Corneal damage, burning, redness, blurred vision.

Ingestion: Corrosive. Damages mucous membranes, severe burning of gastrointestinal tissues, nausea and intestinal pain, vomiting, and possible death if swallowed.

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Indication of any immediate medical attention and special treatment needed

After inhalation: Move person to fresh air. Seek medical attention immediately.

After skin contact: Immediately wash off with plenty of water for at least 20 minutes while removing contaminated clothing. Use mild soap, if available. Wash clothes before reuse. Thoroughly clean shoes before reuse. Get medical attention.

After eye contact: Immediately flush eye, including under the eyelids, with water for at least 20 minutes. If able to do so, remove contact lenses while rinsing eye. Get medical attention.

After ingestion: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SECTION 5: FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use extinguishing agent suitable for surrounding fire.

Unsuitable extinguishing media: Not known

Specific hazards arising from the chemical: Not flammable or combustible. Hydrogen gas is released in contact with most metals. Combustion by-products may include: carbon oxide, nitrogen oxides (NOx), oxides of phosphorous, sulfur oxide.

Special protective equipment and precautions for firefighters

In case of fire, wear a full-face positive-pressure self-contained breathing apparatus and protective suit. Shut off all ignition sources and apply cooling water to sides of containers that are exposed to flames until well after fire is out. Avoid breathing vapors, keep upwind. Keep unnecessary personnel away.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion, and contact with skin and eyes. When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in Section 7 and Section 8.

Environmental Precautions

Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up

Contain and absorb with sand or other absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. In case of large spills, dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fumes/gas/mist/vapors/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products, as this will cause chlorine gas to form.

Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Store in suitable, labeled containers. Do not expose to extreme temperatures.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Phosphoric Acid	3 mg/m ³	1 mg/m ³	None	NIOSH IDLH = 1 mg/m ³ TWH

Appropriate engineering controls

Good general ventilation should be sufficient. Maintain air concentrations below occupational exposure standards. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Individual protection measures

Respiratory: When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators.

Eye: Splash-proof safety glasses are required to prevent eye contact where splashing of product may occur.]

Hand/Body: Wear suitable protective gloves: Gloves should be discarded or replaced if there is any indication of degradation or chemical breakthrough. Wear face protection and protective clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear, Light Straw, Liquid
Odor	: Odorless
Odor threshold	: Not available
pH	: 0.6 - 1.5 (neat)
pH	: 1.8 - 2.3 (1% solution)
Melting point / range	: Not available
Boiling point / range	: Not determined
Flash point	: Not determined
Evaporation rate	: Not determined
Flammable/Explosive limits - lower	: Not available
Flammable/Explosive limits - upper	: Not available
Vapor pressure	: Not determined
Vapor density	: Not determined
Solubility in water	: Completely soluble
Partition coefficient (n-octanol/water)	: Not available
Autoignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity	: Not available
VOC content	: Not available
Density	: Not available
Relative Density	: Approximately 1.085 (Specific Gravity)

SECTION 10: STABILITY AND REACTIVITY

- Reactivity** : Not available
- Chemical stability** : Stable under normal conditions.
- Possibility of hazardous reactions** : Do not mix with bleach or other chlorinated products, as this will cause chlorine gas to form.
- Conditions to avoid** : Do not mix with strong bases or oxidants. Contact with some metals may generate release of hydrogen gas.
- Incompatible materials** : Alkalis
- Hazardous decomposition products** : Decomposition products may include the following materials: carbon Oxide, nitrogen oxides (NOx), oxides of phosphorous, sulfur oxide

SECTION 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure including symptoms related to characteristics

- Inhalation:** May cause sensitization by inhalation.
- Skin contact:** May cause irritation, burns, and redness.
- Eye contact:** Corrosive. Corneal damage, burning, redness, blurred vision. Causes serious eye damage.
- Ingestion:** There is not data available for this product.

Physical/Chemical: Not available

Other relevant toxicity information:

The use of this product by the end-user is safe under normal and reasonable foreseen use.

Numerical measures of toxicity, including delayed and immediate effect

This table shown below addresses the following toxicological endpoints, if applicable:

- Acute toxicity
- Skin corrosion/irritation
- Serious eye damage/irritation
- Respiratory or skin sensitization
- Carcinogenicity
- Reproductive toxicity
- Specific target organ toxicity (single exposure)
- Aspiration hazard

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Phosphoric Acid	Oral LD50 (RAT) = 1530mg/kg Dermal LD50(RABBIT) = 2730 mg/kg Inhalation LC50 (RAT, 1 h) = 850 mg/m3	Target organs: respiratory system, eyes, skin May cause sensitization of susceptible persons. May cause sensitization by inhalation.

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Carcinogenicity information

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Phosphoric Acid	No	No	No

Carcinogenicity : Contains no ingredients above reportable quantities listed as a carcinogen.

Mutagenicity : Not classified

Reproductive Toxicity : Not classified

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity:

The following toxicity information is available for the hazardous ingredient(s) when used as technical grade. The product is anticipated to be safe for the environment at concentrations predicted in settings under normal use conditions.

Toxicity to fish:

The product is not anticipated to be toxic to fish. The following data is for the product tested in accordance with EPA-821-R-02-012 (Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms).

Hazardous substance	Parameter	Value	Exposure Time	Species
Product	LC50	750 mg/L	96 hrs.	Pimephales promelas

Toxicity to aquatic invertebrates:

The product end use dilutions are not anticipated to be toxic to aquatic invertebrates.

Toxicity to algae:

The product is not anticipated to be toxic to algae.

Persistence and degradability:

The majority of the components of this product are anticipated to be biodegradable.

Bioaccumulation Potential:

The bioaccumulation potential of this product are anticipated to be biodegradable.

Mobility:

The mobility of this product (in soil and in water) has not been determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Number and Description : D002 (Corrosive)

Disposal considerations : This product is a RCRA hazardous material.

Disposal of products : Dispose of in an approved hazardous waste disposal facility and in accordance with federal, state, and local regulations.

Disposal of packages : Do not reuse empty containers. Empty containers should be taken to an approved waste-handling facility for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION SECTION 14: TRANSPORT INFORMATION

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The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper shipping classification may vary by packaging, properties, and mode of transportation.

Land Transport (DOT) : Corrosive Liquid, Phosphoric Acid Solution, 8, UN 1805, PG III
Sea Transport (IMDG/IMO) : Corrosive Liquid, Phosphoric Acid Solution, 8, UN 1805, PG III
Air transport (IATA) : Corrosive Liquid, Phosphoric Acid Solution, 8, UN 1805, PG III

SECTION 15: REGULATORY INFORMATION

Occupational Safety and Health Act:

Hazard Communication Rule, 29 CFR 1910.1200: The Occupational Safety and Health Administration (OSHA) require Safety Data Sheets (SDSs) to provide information about any hazard that may be associated with the product and make this information available in the workplace. Since the use pattern and exposure in the workplace are generally not consistent with those experienced by consumers, this SDS may contain health hazard information not relevant to consumer use.

United States Regulatory Information

TSCA 8 (b) Inventory Status

All components of this product are either listed on or exempt from the U.S. Toxic Substances Control Act (TSCA) chemical substance inventory.

TSCA 12 (b) Export Notification : All components are listed.
CERCLA/SARA Section 302 EHS : None
CERCLA/SARA Section 311/312 : Acute health hazard
CERCLA/SARA Section 313 : Does not contain any components with reportable quantities.
California Proposition 65 : This product does not contain substances listed under California Proposition 65.

SECTION 16: ADDITIONAL INFORMATION

NFPA health hazard: 2

NFPA fire hazard: 0

NFPA reactivity: 0

Additional information: None

DISCLAIMER: The information provided on this sheet is not to be considered as warranty or quality specification. The information is given to provide general knowledge as to health and safety based on our understanding of safe handling, storage, transportation, disposal, and release. The information relates to the specific material designated and may not be valid for such material used in combination with any other materials or any process unless specified in the text.

This safety data sheet contains changes from the previous version in sections: 12

Prepared by: Belimed Inc.

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