



## Safety Data Sheet

## Liquid Descaler

P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310	Immediately call a poison center or doctor.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material-damage.
P405	Store locked up.
P406	Store in a corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

## SECTION 3: Composition/information on ingredients

### Mixtures

### Components

#### 1. Phosphoric acid

Concentration 15 - 40 %\*  
CAS no. 7664-38-2

#### Trade secret statement (OSHA 1910.1200(i))

\*The specific chemical identities and/or actual concentrations or actual concentration ranges for one or more listed components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

## SECTION 4: First-aid measures

### Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled	Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.  Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.
In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Call a poison center or doctor if irritation develops or persists.  Acute and delayed symptoms and effects: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

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In case of eye contact

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

If swallowed

Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: Harmful if swallowed. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

### Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

### Indication of immediate medical attention and special treatment needed, if necessary

No data available.

## SECTION 5: Fire-fighting measures

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Specific hazards arising from the chemical

Oxides of phosphorus.

### Special protective actions for fire-fighters

Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

### Further information

Use water spray to cool unopened containers.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear respiratory protection if necessary. Do not breathe mist/vapors/spray. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

### Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13, Disposal Considerations, for additional information.

**Methods and materials for containment and cleaning up**

Stop leak if you can do it without risk. Sweep up and shovel into suitable containers for disposal. Consider neutralizing if safe to do so.

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****Precautions for safe handling**

Do not swallow. Do not breathe mist, vapors, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in a corrosive resistant container with a resistant inner liner. Ensure container is stored away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

**Specific end use(s)**

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

**SECTION 8: Exposure controls/personal protection****Control parameters****CAS: 7664-38-2**

Phosphoric acid

Cal/OSHA (US): 1 mg/m<sup>3</sup>, (ST) 3 mg/m<sup>3</sup> PEL inhalation; NIOSH (US): 1 mg/m<sup>3</sup>, (ST) 3 mg/m<sup>3</sup> REL inhalation; US/OSHA (US): 1 mg/m<sup>3</sup> PEL inhalation

**Appropriate engineering controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

**Individual protection measures, such as personal protective equipment (PPE)****Eye/face protection**

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Ensure that eyewash stations and/or safety showers are close to the workstation location if working with concentrated product.

**Skin protection**

Wear chemical-protective gloves. Consult manufacturer specifications for further information. Inspect gloves prior to use and dispose or change if they become contaminated or damaged.

**Body protection**

Wear protective clothing. Clothing with full length sleeves and pants should be worn. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Not required under normal use conditions. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air

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respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Thermal hazards

No data available.

## SECTION 9: Physical and chemical properties

Physical state	Liquid
Color	Green
Odor	Chemical
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammmability limit	No data available.
Flash point	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
pH	<1.5
Kinematic viscosity	No data available.
Solubility	Completely soluble in water
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Density and/or relative density	1.17
Relative vapor density	No data available.
Particle characteristics	No data available.

## SECTION 10: Stability and reactivity

### Reactivity

Stable under recommended storage conditions.

### Chemical stability

Stable under normal storage conditions.

### Possibility of hazardous reactions

No data available.

### Conditions to avoid

Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

### Incompatible materials

Phosphoric acid will react violently with strong bases. Avoid contact with fluorine, strong reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide, and strong oxidizing agents

### Hazardous decomposition products

No data available.

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Symptoms (including delayed and immediate effects):

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Inhalation: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

Ingestion: Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

## Phosphoric acid

LD50 Oral - Rat - 1530 mg/kg

LD50 Skin - Rat - 2740 mg/kg

LC50 Inhalation - Rat - > 850 mg/m<sup>3</sup> - 1 h

## Skin corrosion/irritation

Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

## Serious eye damage/irritation

Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

## Respiratory or skin sensitization

No data available.

## Germ cell mutagenicity

No data available.

## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

No data available.

## Specific target organ toxicity (STOT) - single exposure

No data available.

## Specific target organ toxicity (STOT) - repeated exposure

No data available.

## Aspiration hazard

No data available.

## SECTION 12: Ecological information

### Toxicity

No data available on product

Acute aquatic hazard: this material has been classified as nonhazardous for a acute aquatic exposure. Acute toxicity estimate >100 mg/L

Long-term aquatic hazard: This material has been classified as nonhazardous for chronic aquatic exposure.

Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available or in the absence of chronic toxicity, acute toxicity estimate greater > 100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log KW<4.

**Persistence and degradability**

No data available on product

**Bioaccumulative potential**

No data available on product

**Mobility in soil**

No data available.

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**SECTION 13: Disposal considerations****Disposal methods****Product disposal**

Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements. For personal protection see section 8.

**Packaging disposal**

Dispose of as unused product.

**SECTION 14: Transport information****DOT (US)**

UN Number: UN1760

Class: 8

Packing Group: II

Proper Shipping Name: Corrosive liquids, n.o.s. (contains Phosphoric acid)

**SECTION 15: Regulatory information****Safety, health and environmental regulations specific for the product in question****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Chemical name: PHOSPHORIC ACID

CAS number: 7664-38-2

**New Jersey Right To Know Components**

Common name: PHOSPHORIC ACID

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CAS number: 7664-38-2

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## California Cleaning Product Right to Know Act of 2017 (SB 258)

Chemical Name	CAS Number	Function
Phosphoric acid	7664-38-2	Descaling agent

## SECTION 16: Other information

### Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall California Correctional Training and Rehabilitation Authority be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if California Correctional Training and Rehabilitation Authority has been advised of the possibility of such damages.