

SECTION 1 - IDENTIFICATION

Product identifier/Trade name: CHANDLER DESCALER LIME AND SCALE REMOVER

Other means of identification: 1808079

Recommended use: Lime and scale remover

Restriction on use: For industrial, institutional and food plant use only.

Initial supplier identifier: CHANDLER
225 Thorne Avenue,
St John, NB, Canada E2L 4L9
Phone: 1-800-363-9611

Emergency phone number: (613) 996-6666 (CANUTEC)

SECTION 2 - HAZARDS IDENTIFICATION

2a GHS (Globally Harmonized System) classification

This product is classified as:

Acute oral toxicity, category 2
Skin Corrosion/Irritation — category 1
Serious eye damage/eye irritation — category 1
May corrosive for metals - category 1

2b Label elements

Pictogram



Signal word DANGER, CORROSIVE

Hazard statements

TOXIC IF SWALLOWED. CAUSES SERIOUS EYE DAMAGE AND SKIN BURNS. MAY BE CORROSIVE TO METALS.

Precautionary statements

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Do not breathe vapours. Wear protective gloves and eye and face protection. Wash thoroughly after handling.

IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor.

IF exposed or concerned: Get medical advice

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Immediately call a POISON CENTER or doctor.

IF ON SKIN: Remove all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air in a well-ventilated area and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (weight)	GHS CLASSIFICATION
Phosphoric Acid	7664-38-2	25-50	Acute Toxicity oral, Category 2 Skin Corrosion/Irritation Category, 1 Eye damage/Irritation Category, 1

The actual concentrations are withheld as a trade secret.

SECTION 4 - FIRST AID MEASURES

4a Description of first aid measures**Eye contact:**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if present and easy to do. Continue to rinse for at least 15 minutes. If irritation persists, continue rinsing. Chemical burns must be treated promptly by a physician. Immediately call a POISON CENTER or doctor.

Skin contact:

Rinse immediately contaminated skin for at least 15 minutes or more if necessary. Remove all contaminated clothing, jewelry and shoes. Immediately call a POISON CENTER or doctor. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation:

Remove person to fresh air and keep comfortable for breathing. In case of unconsciousness place patient stably in side position for transportation. Immediately call a POISON CENTER or doctor.

Ingestion:

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, get him to drink plenty of water to dilute product. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs spontaneously, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4b Most important symptoms and effects

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

4c Immediate medical attention and special treatment needed

No data available.

SECTION 5 - FIRE FIGHTING MEASURES

5a Extinguishing media

Suitable extinguishing media:

Water, foam, dry chemicals, carbon dioxide. Product itself is not flammable.

Unsuitable extinguishing media:

None known.

5b Specific hazards for product

Hazardous combustion products:

Water vapors. Carbon oxides, phosphorus derivatives.

Special protective equipment and precautions for firefighters

Special fire-fighting procedures/equipment:

During a fire, irritating smoke and fumes may be generated. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from irritating products produced during the combustion. Move containers from fire area if it can be done without risk.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6a Personal precautions, protective equipment, and emergency procedures

Personal protection:

Avoid contact with eyes and skin. Use adequate aeration and ventilation. Floor will be slippery in case of a spill. Use appropriate personal protection equipment (see section 8)

6b Methods and materials for containment and cleaning:

Stop the leak. For large spills, pump the product into drums or clean up spills using absorbent material. Resume cleaning by rinsing with water. Caution: floors will be slippery.

6c Environmental precautions:

Product is readily biodegradable but is corrosive. Do not let go to the sewers.

SECTION 7 - HANDLING AND STORAGE

7a Precautions for Safe handling:

Avoid contact with eyes and skin. Wear rubber gloves, protective clothing and eye or face protection. Always add product to water. Use cold water to prevent excessive heat generation.

7b Condition for safe storage:

Keep in original tightly sealed container in a well-ventilated room. Do not store on surfaces that may come into contact with food products. KEEP FROM FREEZING.

7c Special packaging materials: Store in its original container. Material may be corrosive to certain metals like aluminum.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

8a Control parameters

	Ontario Time-weighted Average Limit (TWA)	Ontario Short-Term Exposure Limit (STEL)	Notations
Phosphoric Acid	3,0mg/m ³	3,0 mg/m ³	

8b Engineering controls:

Provide adequate ventilation.

8c Individual protection measures

Respiratory Protection:

Not required under normal applications.

Respirator NIOSH/MSHA approved if large spill and lack of ventilation or if formation of mists.

Skin protection and other protective equipment:

Plastic or rubber gloves recommended. Protective clothing. Waterproof boots in case of spills.

Eye / face protection:

Eye protection or face protection.

General hygiene considerations:

KEEP OUT OF REACH OF CHILDREN. Avoid contact with eyes and skin. Never eat, drink, or smoke in work areas. Good hygiene is recommended after use of this product.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor:

Green liquid, odourless

Odour threshold:

N/Av

pH :

1,0-2,5

Melting point and freezing point:

Approximately 0 °C

Boiling point:	Approximately 100 °C
Flash point:	None to boil
Evaporation rate (n-BuAc =1):	Approximately 0.4 (water)
Lower flammable limit (% by volume):	N/Av
Upper flammable limit (% by volume):	N/Av.
Explosion data - Sensitivity to mechanical impact:	Not sensitive
Explosion data - Sensitivity to static discharge:	Not sensitive
Vapour pressure (mm Hg)	Approximately 20 (water)
Vapour density:	Approximately 0.6 (water)
Specific gravity or density (water = 1 at 4 °C):	1.15-1,20 g/cm ³ @ 20 °C
Solubility in water:	Soluble
Partition coefficient – n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature	Not available
Viscosity:	<50 cps @ 25 °C

SECTION 10 - STABILITY AND REACTIVITY

10a Reactivity:

Not applicable when used as directed. It is incompatible with some materials, see below.

10b Chemical stability:

Stable at room temperature, in normal handling and storage conditions.

10c Possibility of hazardous reactions:

May react with strong alkalis, strong oxidizing agents and metals like aluminum.

10d Conditions to avoid:

Avoid contact with strong alkalis, strong oxidizers and metals like aluminum etc.

10e Incompatible materials

Strong alkalis, strong oxidizers, soft metals

10f Hazardous decomposition products:

water vapors. Carbon oxides, phosphorus components.

SECTION 11 - TOXICOLOGICAL INFORMATION

Primary entry route(s): Eye, inhalation, and ingestion.

Eye: Extremely corrosive. May cause burns, irritation, redness, tears, burning sensation.

Skin: Corrosive. May cause sever irritation and burns on skin, necrosis of cutaneous tissues.

Inhalation: Toxic. Breathing high concentrations may cause headache, nausea, vomiting, dizziness and burns of respiratory tract.

Ingestion: Toxic. Violent pain in throat, mouth, gut, oesophagus and/or stomach perforation, collapse, possible death.

Carcinogenicity: No ingredients classified as carcinogenic by IARC

Teratogenicity, mutagenicity, other reproductive effects: No applicable information found.

Skin sensitization: Ingredients not sensitizing

Respiratory tract sensitization: Not available

Synergistic materials: Not available

Toxicological data: The calculated LD₅₀ for this product is greater than 4,000 mg/Kg, oral, rat; our products are not tested on animals. However, for corrosive materials, the estimated toxicity is not relevant.

Ingredient	LD ₅₀ (route, species)	LC ₅₀ # hours (species)
Phosphoric acid	1500mg/kg (oral, rat)	Not available

For more details, refer to Section 3.

SECTION 12 - ECOLOGICAL INFORMATION
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12a Ecotoxicity :

TOXICITY (Fish)	Results	Exposure time	Method
Phosphoric Acid	3,25mg/L	96H	Not available

TOXICITY (Algae)	Results	Exposure time	Method
Phosphoric Acid	100mg/L	96H	Not available

12b Persistence and degradability: Product is readily biodegradable.

12c Bioaccumulation potential: Not available

12d Mobility in soil: There is no test data on this product.

12e Other adverse effect No applicable information found

SECTION 13 - DISPOSAL CONSIDERATIONS

Eliminate according to federal, provincial and local regulations.

SECTION 14 - TRANSPORTATION INFORMATION
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Transportation of Dangerous Goods:

UN number	UN1805
Proper shipping name:	Phosphoric Acid Solution mixture
Class:	8
Packing group:	III
Special case:	

SECTION 15 - REGULATORY INFORMATION
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In Canada**WHMIS information:**

Product is regulated according to the *Hazardous Products Regulations* (HPR) in Canada. This product has been classified in accordance with the hazard criteria of the HPR and this MSDS contains all the information required by the HPR.

WHMIS Classification:

See section 2a.

CEPA information: Ingredients are listed on the DSL inventory.

SECTION 16 - OTHER INFORMATION

Date of latest revision: 2022-05-02

References:

1. Manufacturer'/suppliers' MSDS.
2. Occupational Exposure Limits for Ontario Workplaces required under Regulation 833
3. International Agency for Research on Cancer Monographs
4. The European Chemicals Agency (ECHA) website.

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act
cps	Centipoises
DSL	Domestic Substance List
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal concentration
LD	Lethal Dosage
N/Av	Not available
N/Ap	Not Applicable
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value
WHMIS	Workplace Hazardous Materials Information System
	End of the MSDS