

02/13/2017

02/13/2017

1 • Identification

- . **Product name:** DESCALER LIME AND SCALE REMOVER
- . **Article number:** 0330278103
- . **Recommended use:** Delimiting agent
- . **Restrictions on use:** All other uses than those indicated on the product label and technical data sheet
- . **Manufacturer:**
CHANDLER
225 Thorne Avenue,
Saint John, New Brunswick
Canada
E2L 4L9
1-800-363-9611
- . **Emergency telephone number:** CANUTEC 1-613-996-6666

2 • Hazard identification

- . **Classification of the product as sold:**
Met. Corr. 1 H290 May be corrosive to metals.
Skin Corr. 1C H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.
STOT SE 3 H335 May cause respiratory irritation.

- . **Label elements**

- . **Hazard pictograms:**



GHS05 GHS07

- . **Signal word:** Danger
- . **Hazard statements:**
May be corrosive to metals.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
- . **Precautionary statements:**
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Immediately call a POISON CENTER or a doctor.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material-damage.
Store locked up.
Store in corrosive resistant container or a container with a corrosion resistant inner liner.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents and container in accordance with local, regional and national regulations.

(Contd. on page 2)

02/13/2017

02/13/2017

Product name: DESCALER LIME AND SCALE REMOVER

(Contd. of page 1)

- . **Classification system**
- . **NFPA ratings (scale 0 - 4):**



- . **Hazard not otherwise classified:** None Known
- . **Notes:** For the wording of the listed abbreviations refer to section 16.

- . **Product AT USE DILUTION:** N/A

3 • Composition/Information on ingredients

- . **Chemical characterization: Mixtures**
- . **Description:** Aqueous mixture consisting of the following components:

. **Components:**

7664-38-2	Phosphoric Acid	15-40%
-----------	-----------------	--------

- . **Additional information:** Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4 • First aid measures. **Description of first aid measures**. **After inhalation:**

In case of unconsciousness place patient stably in side position for transportation. Get medical attention.

. **After skin contact:**

Remove immediately all contaminated clothing. Rinse skin with water or shower for at least 15 minutes. Consult a doctor if skin redness and irritation persist.

. **After eye contact:**

Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do so. Continue rinsing for a minimum of 15 to 60 minutes. Then consult a doctor.

. **After ingestion:**

Drink copious amounts of water and provide fresh air. Immediately call a doctor. Do not induce vomiting.

- . **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

5 • Firefighting measures

- . **Suitable extinguishing media:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- . **Specific hazards arising from the product:** No further relevant information available.
- . **Special protective equipment and precautions for fire-fighters:**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
- . **Additional information:** This product is not flammable.

6 • Accidental release measures. **Personal precautions, protective equipment and emergency procedures:**

Wear recommended protective equipment(s). Keep unprotected persons away.

Protective gloves (See Protection of Hands)

Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from organic vapors.

(Contd. on page 3)

02/13/2017

02/13/2017

Product name: DESCALER LIME AND SCALE REMOVER

(Contd. of page 2)

- . **Environmental precautions:** No special measures required.
- . **Methods and material for containment and cleaning up:**
Surround and absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Use neutralizing agent (eg. sodium bicarbonate).
- . **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 • Handling and storage

- . **Precautions for safe handling:** Ensure good ventilation at the workplace.
- . **Information about protection against explosions and fires:** No special measures required.
- . **Requirements to be met by storerooms and receptacles:** Unsuitable material for receptacle: aluminium.
- . **Information about storage in one common storage facility:** Store away from metals.
- . **Conditions for safe storage, including any incompatibilities:**
Keep in the original receptacle tightly sealed.
Store under lock and key and out of the reach of children.
- . **Specific end use(s):** No further relevant information available.

8 • Exposure controls/ Personal protection

- . **Components with limit values that require monitoring at the workplace:**

7664-38-2 Phosphoric Acid

EL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
EV	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

- . **Undiluted Product**
- . **Personal protective equipment:**



Respiratory protective equipment (If applicable, see breathing equipment for more details)



Safety goggles (see Eye protection)



acid resistant gloves (recommended)



Protective clothing (If applicable, see Body protection for more details)

(Contd. on page 4)

02/13/2017

02/13/2017

Product name: DESCALER LIME AND SCALE REMOVER

(Contd. of page 3)

. General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

. Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Use suitable respiratory protective device when high concentrations are present.

If room is well-ventilated, a respirator is not needed under normal and intended conditions of product use.

. Protection of hands:

Acid resistant gloves

The glove material has to be impermeable and resistant to the product.

Protective Gloves

Check protective gloves prior to each use for their proper condition

. Eye protection:

Safety glasses are suggested when using this product in heavy use and institutional environments

Wear splash-proof chemical goggles in an industrial environment.

. Body protection:

Protective clothing is recommended only under exceptional circumstances such as fire or spill of concentrated product

Acid resistant protective clothing (recommended)

9 • Physical and chemical properties

. Form:	Liquid
. Colour:	Green
. Odour:	Odourless
. Odor threshold:	Not determined
. pH-Value:	1.9-2.4
. Melting point/Melting range:	Not determined
. Boiling point/Boiling range:	N/D
. Fusion temperature / range:	Not determined
. Flash point:	Not determined
. Flammability (solid, gaseous):	Not applicable
. Ignition temperature:	Not determined.
. Decomposition temperature:	Not determined
. Auto igniting:	Product is not selfigniting.
. Danger of explosion:	Product does not present an explosion hazard.
. Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
. Vapour pressure:	N/D
. Relative density:	1,210-1.225
. Vapour density (air=1):	<1 (aqueous solution)
. Evaporation rate:	Not determined

(Contd. on page 5)

02/13/2017

02/13/2017

Product name: DESCALER LIME AND SCALE REMOVER

(Contd. of page 4)

. **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

. **Partition coefficient (n-octanol/water):** Not determined

10 • Stability and reactivity

- . **Reactivity:** Not determined.
- . **Chemical stability:** The product is stable.
- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **Possibility of hazardous reactions:** Reacts with alkali.
- . **Conditions to avoid:** Avoid freezing and extreme heat conditions.
- . **Incompatible materials:**
In contact with most metals, produces hydrogen gas, a flammable and explosive gas. It is particularly corrosive to ferrous metals, zinc and aluminum.
- . **Hazardous decomposition products:**
Hydrogen.
In case of decomposition: carbon monoxide and carbon dioxide and traces of volatile halogenated compounds.

11 • Toxicological information

- . **Information on the likely routes of exposure**
- . **Numerical measures of acute toxicity:**

. Components		Type	Value (Species)
. Mean of exposure			
. ATE (Acute Toxicity Estimates)			
Oral	LD50		4308 mg/kg (Rat)
Dermal	LD50		7870 mg/kg (Rbt)
Inhalative	LC50 (4 h)		31.6 mg/L
. 7664-38-2 Phosphoric Acid			
Oral	LD50		1500 mg/kg (Rat)
Dermal	LD50		2740 mg/kg (Rbt)

- . **Symptomes related to the physical, chemical and toxicological characteristics**
- . **If on the skin:** CORROSIVE: Strong caustic effect on skin and mucous membranes.
- . **If on the eye:**
CORROSIVE: Strong caustic effect.
Strong irritant with the danger of severe eye injury.
- . **After ingestion:** May cause irritation of the gastrointestinal tract, nausea, vomiting and headache.
- . **Sensitization:** No sensitizing effects known.
- . **Delayed and immediate effects, and chronic effects from short-term and long-term exposure:**
Prolonged or frequent contact can cause eczema and inflammation of the skins as a results of degreasing.

. **Carcinogenic categories:**

. IARC (International Agency for Research on Cancer)	
Triarylmethane Dye Acid	3
. NTP (National Toxicology Program)	
None of the ingredients is listed.	

(Contd. on page 6)

02/13/2017

02/13/2017

Product name: DESCALER LIME AND SCALE REMOVER

(Contd. of page 5)

12 • Ecological information

- . **Bioaccumulative potential:** No further relevant information available.
- . **Mobility in soil:** Not determined
- . **Ecotoxicity:** No relevant information available.
- . **Other adverse effects** No further relevant information available.

13 • Disposal considerations

- . **Waste treatment methods recommendation:**
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with local authority requirements.
Dispose in accordance with all applicable federal, state, provincial and local laws and regulations. Contact your local, state, provincial or Federal environmental agency for specific rules.
- . **Uncleaned packagings recommendation:**
Do not re-use empty containers.
Dispose of packaging according to regulations on the disposal of packagings.
- . **Recommended cleansing agent:**
Water
Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 • Transport information

- . **UN-Number**
- . **DOT/TDG/IMDG/IATA** UN1805
- . **UN proper shipping name**
- . **DOT/TDG** Phosphoric acid solution mixture
- . **IMDG, IATA** PHOSPHORIC ACID, SOLUTION mixture
- . **Transport hazard class(es)**

- . **DOT, IMDG, IATA**
- . **Class** 8 Corrosive substances
- . **Packing group**
- . **DOT, IMDG, IATA** III

15 • Regulatory information

- . **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . **Canadian substance listings**

. Canadian Domestic Substances List (DSL)

All ingredients are listed.

. Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

. Canadian Ingredient Disclosure list (limit 1%)

7664-38-2 | Phosphoric Acid

(Contd. on page 7)

02/13/2017

02/13/2017

Product name: DESCALER LIME AND SCALE REMOVER

(Contd. of page 6)

16 • Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

. Department issuing SDS:

Prepared by :

Regulatory Affairs Department

. Date of creation/last revision: 07/25/2015**. Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent