



Scale Zero

Safety Data Sheet

Date of Issue: 16/05/2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Form: Liquid Mixture

Product Name: Scale Zero

Product Code: STC0208

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the mixture: Descaler

1.3 Details of the supplier of the safety data sheet

Sci-Tech Engineered Chemicals Inc.

9902 90th Avenue

Morinville AB, T8R 1K7

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1.4 Emergency telephone number

CANUTEC (613) 996-6666

SECTION 2: Hazards identification

2.1 Classification of the substance of mixture

WHMIS 2015 - GHS Classification

Skin Corrosion 1B

Eye Damage 1

Acute toxicity 4

Aquatic toxicity 2

2.2 Label elements



DANGER

Hazards:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautions: P202 Do not handle until all safety precautions have been read and understood.
P102 Keep out of reach of children.
P103 Read label before use.
P280 Use personal protective equipment as required.
P261 Avoid breathing dust/fumes/mist/vapours/spray.
P262 Do not get in eyes, on skin, or on clothing.
P233 Keep container tightly closed.

2.3 Other Hazards

H290 May be corrosive to metals.

SECTION 3: Composition/Information on ingredients

Component	CAS#	Concentration	LD50 (rat, oral)
Phosphoric acid	7664-38-2	30 - 50 %	1530 mg/kg
Citric acid	77-92-9	5- 10 %	3000 mg/kg

SECTION 4: First-aid measures

Eye Contact: In case of EYE CONTACT, remove contact lenses and flush with water or saline solution for at least 15 minutes. Seek immediate medical assistance. May cause severe and permanent eye damage.

Skin Contact: In case of SKIN CONTACT, remove contaminated clothing and thoroughly rinse skin with water. If burns or persistent irritation are present, seek medical assistance. May cause skin burns or irritation.

Inhalation: In case of INHALATION, remove victim to fresh air. If irritation persists seek medical attention. May cause irritation of the upper respiratory tract.

Ingestion: In case of INGESTION, give victim a glass of water to dilute the chemical in the stomach. DO NOT induce vomiting. If victim vomits, lean them forward to prevent aspiration into the lungs. May cause burning of the esophagus, stomach resulting in severe gastrointestinal distress including vomiting and diarrhea.

SECTION 5: Fire fighting measures

Extinguishing media: Non- flammable. Use media appropriate for surrounding fire.

Chemical hazards: Spilled chemical is corrosive and can generate heat and carbon dioxide if mixed with acids.

Protective equipment for fire fighters: Standard firefighter bunker gear.

SECTION 6: Accidental release measures

Use recommended respiratory protection. Wear suitable protective clothing, gloves and eye/face protection. Stop leak if safe to do so. Evacuate unnecessary personnel. Ventilate area. Keep upwind. Contain spill and prevent entry into sewers. Collect spilled material and place in a container suitable for disposal. Small spills and residue can be diluted with baking soda or soda ash and flushed to the sewer.

SECTION 7: Handling and storage

Precautions for handling:	Wear proper protective equipment when handling product. Avoid generating mists. Dispense directly from container when possible.
Condition for safe storage:	Store in a cool, dry area away from incompatibles. Keep container closed and out of reach of children when not in use.

SECTION 8: Exposure controls/personal protection

Control parameters:	Provide sufficient ventilation to keep vapors below the permissible exposure limit. Ensure adequate ventilation, especially in confined areas. Packaging and unloading areas and open processing equipment may require mechanical exhaust systems. Corrosion-proof construction recommended.
Appropriate engineering controls:	If possible, meter directly from container to avoid contact with the concentrate.
Personal protective equipment:	If directly handling concentrate, use safety glasses with side shields and nitrile gloves. Ensure access to eye wash and emergency shower stations.

SECTION 9: Physical and chemical properties

Appearance:	Clear colorless liquid
Odour:	Sharp
Odour threshold:	n.av.
pH:	1.0 +/- 0.5
Melting point:	0 °C
Initial boiling point and boiling range:	n.av.
Flash point	Non-flammable
Evaporation rate:	n.av.
Flammability:	Non-flammable
Upper/lower flammability limits:	n.av.
Vapour pressure:	n.av.
Vapour density:	n.av.
Relative density:	1.28 g/mL
Solubility:	n.av.
Partition coefficient: n-octanol/water:	n.av.
Auto-ignition temperature:	n.ap.
Decomposition temperature:	n.av.
Viscosity:	n.av.

SECTION 10: Stability and reactivity

Reactivity:	Non-reactive.
Chemical stability:	Stable under normal conditions.
Hazardous reactions:	Contact with bases will release heat and carbon dioxide.
Conditions to avoid:	Avoid contact with bases. Contact with bases can generate heat and carbon dioxide.
Incompatible materials:	Avoid contact with bases, strong reducers and strong oxidizers.
Hazardous decomposition products:	Can thermally decompose to produce carbon dioxide and carbon monoxide.

SECTION 11: Toxicological information

Routes of exposure:	Ingestion, skin and eye contact.
Symptoms of exposure:	Contact with skin and eyes can cause severe burning and permanent damage. Ingestion can cause pain, gastrointestinal distress and perforation of the gastrointestinal system.
Delayed and immediate effects:	Contact with skin and eyes can cause immediate damage.
Acute toxicity estimate:	2100 mg/kg rat (oral)

SECTION 12: Ecological information

Ecotoxicity:	Data not available
Persistence and degradability:	Data not available
Bioaccumulative potential:	Low potential for bioaccumulation
Mobility in soil:	Data not available
Other adverse effects:	Inorganic phosphates have the potential to increase the growth of freshwater algae, whose eventual death will reduce the available oxygen for aquatic life.

SECTION 13: Disposal considerations

Product should be disposed of in accordance to provincial or state and local government requirements prior to disposal. If the product was supplied in a single use container, care should be taken to dispose of the container in a responsible manner in accordance to local regulations.

SECTION 14: Transport information

Canadian TDG: Corrosive Liquid, Acidic, Inorganic n.o.s. (Phosphoric acid, hydrochloric acid): Class 8, UN3264, PG II

SECTION 15: Regulatory information

DSL: All components are listed on the Canadian DSL

SECTION 16: Other information

Prepared by: Sci-Tech Engineered Chemicals Research and Development Department

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