

TECHSCALE

SECTION 1. IDENTIFICATION

Product Identifier	TECHSCALE
Other Means of Identification	366WIP
Recommended Use	Delimer/ Descaler.
Manufacturer	Lawrason's, Inc, 460 Wyecroft Road, Oakville, Ontario, L6K 2G7, (905) 842-8300, www.Lawrasons.com
Supplier Identifier	Struthmann Enterprises Ltd., 287 Tiffin Street, Unit 13, Barrie, Ontario, L4N 7R8, (705) 726-9892, www.struthmann.com
Emergency Phone No.	CANUTEC, 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone
SDS No.	65423
Date of Preparation	February 01, 2017

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015).

Classification

Acute toxicity (Oral) - Category 4; Acute toxicity (Inhalation) - Category 1; Skin corrosion - Category 1; Serious eye damage - Category 1; Specific target organ toxicity (single exposure) - Category 3

Label Elements



Danger

Hazard Statement(s):

Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause respiratory irritation.

Precautionary Statement(s):

Keep only in original packaging.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash hands and skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTRE or doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTRE or doctor.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Phosphoric acid solutions	7664-38-2	30.00-60.00		
Hydrochloric acid	7647-01-0	10.00-30.00		
Glycolic acid	79-14-1	3.00-7.00		
Citric acid	77-92-9	1.00-5.00		

SECTION 4. FIRST-AID MEASURES

First-aid Measures**Inhalation**

If breathing is difficult, move person into fresh air. Keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with water or shower. Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Immediately call a Poison Centre or doctor.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Centre or doctor.

Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. Immediately call a Poison Centre or doctor.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media**Suitable Extinguishing Media**

Not combustible. Use extinguishing agents compatible with product and suitable for surrounding fire. Carbon dioxide, dry chemical powder or appropriate foam.

Unsuitable Extinguishing Media

Water. Do not use water jet as an extinguisher, as this will spread the fire.

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Specific Hazards Arising from the Product

May accumulate in hazardous amounts at ceilings and at the top of confined spaces, resulting in a health hazard.

Special Protective Equipment and Precautions for Fire-fighters

Use extreme caution. Fight fire from a safe distance or a protected location.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Do not get in eyes, on skin or on clothing. Do not breathe in this product. Avoid generating vapours or mists.

Conditions for Safe Storage

Store in an area that is: well-ventilated, cool, separate from incompatible materials (see Section 10: Stability and Reactivity), out of direct sunlight and away from heat and ignition sources.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Hydrochloric acid		2 ppm		5 ppm		3 ppm
Phosphoric acid solutions	1 mg/m3	3 mg/m3	1 mg/m3	Not established	Not established	Not established
Glycolic acid	Not established		Not established		Not established	
Citric acid	Not established		Not established		Not established	

Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Wear a chemical splash suit and respiratory protection.

Respiratory Protection

Wear a full facepiece NIOSH approved air-purifying respirator with an acid gas cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Green liquid.
Odour	Acidic
Odour Threshold	0.3 ppm Causes olfactory fatigue.
pH	1.00 - 2.00
Melting Point/Freezing Point	-30 °C (-22 °F) (melting); -30 °C (-22 °F) (freezing)
Initial Boiling Point/Range	> 100 °C (212 °F)
Flash Point	Not applicable
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	84 mm Hg at 20 °C
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.182
Solubility	Very soluble in water
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Bulk Density	1.05 - 1.18 kg/L

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Incompatible materials. Prolonged exposure to high temperatures. Do not mix with other chemicals.

Incompatible Materials

Bases, amines, metals, permanganates, (e.g. potassium permanganate), fluorine, metal acetylides, hexalithium disilicide.

Hazardous Decomposition Products

Hydrogen chloride; chlorine; hydrogen gas.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Hydrochloric acid	3124 ppm (rat) (1-hour exposure)	900 mg/kg (rabbit)	5010 mg/kg (rabbit)

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Phosphoric acid solutions	> 850 mg/m ³ (rat) (1-hour exposure)	1530 mg/kg (rat)	2740 mg/kg (rabbit)
Glycolic acid	3.6 mg/L (male rat) (4-hour exposure)	1938 mg/kg (rat)	Not available
Citric acid	Not available	5040 mg/kg (mouse)	Not available

Skin Corrosion/Irritation

Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation

Causes serious eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Vapours and mist will irritate throat and respiratory system and cause coughing.

Skin Absorption

Causes skin burns.

Ingestion

Harmful if swallowed. Causes digestive tract burns. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause irritation of the respiratory system. May cause respiratory tract injury.

Respiratory and/or Skin Sensitization

No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Hydrochloric acid	Not Listed	Not Listed	Not Listed	Not Listed
Phosphoric acid solutions	Not Listed	Not Listed	Not Listed	Not Listed
Glycolic acid	Not Listed	Not Listed	Not Listed	Not Listed
Citric acid	Not Listed	Not Listed	Not Listed	Not Listed

Reproductive Toxicity

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Germ Cell Mutagenicity

Not known to be a mutagen.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Because of the low pH of this product, it would be expected produce significant Ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Persistence and Degradability

Not biodegradable.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

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Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1760	Hydrochloric and Phosphoric acid	8	III
Canadian TDG	1760	Hydrochloric and Phosphoric acid	8	III

Environmental Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

This section is not required by WHMIS.

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

SECTION 16. OTHER INFORMATION

NFPA Rating Health - 3 Flammability - 0 Instability - 1

SDS Prepared By Technical Manager

Phone No. 905-842-8300

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Key to Abbreviations IARC = International Agency for Research on Cancer

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).

Additional Information All information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations of mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the

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