Michigan State Industries

SAFETY DATA SHEET

MSI- 8761 – Delimer

Date: 8/29/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Delimer

Other Means of Identification

Product Code 8761

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Lime, scale, rust, mineral deposit remover. Cleans & Brightens.

Details of the Supplier of the Safety Data Sheet

Manufacturer Address Michigan State Industries
1780 E. Parnall Rd.
Jackson, MI. 49201

Emergency Telephone Number

Company Phone Number 517-780-6726

Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity- Inhalation (Dusts/Mists)	Category 4
Skin Corrosion/ Irritation	Category 1 Sub-category C
Serious Eye Damage/ Eye Irritation	Category 1

Signal Word **DANGER**

Hazard Statements CORROSIVE. May be harmful if swallowed or inhaled. Causes severe skin burns and eye damage. May be corrosive to metals.

Appearance: Clear Liquid **Physical State:** Liquid **Odor:** Mild Acid/Detergent odor

Precautionary Statements - Prevention
Do not breathe vapor or mist. Do not ingest. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Use in well-ventilated areas.

Precautionary Statements - Storage
KEEP OUT OF REACH OF CHILDREN. Store in a dry place no lower in temperature than 50° F or higher than 120° F. Store in a tightly closed container in a secure area inaccessible to children. Store away from oxidizing agents, alkalis, metal, and heat.

Precautionary Statements - Disposal
Do not reuse container. Triple rinse empty container with water. Plastic containers may be offered for recycling. Waste must be disposed of in accordance with federal, state, and local environment control regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Phosphoric Acid	7664-38-2	<15%
Hydrochloric Acid	7647-01-0	<3%

4. FIRST AID MEASURES

First Aid Measures

Inhalation — Move person to fresh air. If not breathing, call 911 or an ambulance then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Eye Contact — Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion — Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Skin Contact — Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Wash contaminated clothing prior to reuse. Call a poison control center or doctor for treatment advice.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians — No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media — Foam, Dry powder, carbon dioxide, water spray. Use suitable material for primary source of fire.

Unsuitable Extinguishing Media — Do not use a heavy water stream.

Specific Hazards Arising from the Chemical — Not Determined

Protective Equipment and Precautions for Firefighters — Fire fighters should use an OSHA approved self-contained breathing apparatus and protective clothing when any material is involved in a fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions — Wear protective clothing as required. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Methods and Material for Containment and Cleaning Up

Methods for Containment — Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up — Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling — Keep container closed while not in use. Avoid contact with eyes. Wash thoroughly after handling. Use in well-ventilated area.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions — KEEP OUT OF REACH OF CHILDREN. Store in a cool, dry place away from direct sunlight. Store in a tightly secure area inaccessible to children.

Incompatible Materials — Oxidizing agents, alkalis, metal, and heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric Acid 7664-38-2	TWA: 1 mg/m^3 STEL: 3 mg/m^3	TWA: 1 mg/m^3 STEL: 3 mg/m^3	TWA: 1 mg/m^3 STEL: 3 mg/m^3
Hydrochloric Acid 7647-01-0	TWA: 1 mg/m^3 STEL: 7 mg/m^3	TWA: 1 mg/m^3 STEL: 7 mg/m^3	TWA: 1 mg/m^3 STEL: 7 mg/m^3

Appropriate Engineering Controls

Engineering Controls — Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection — Splash proof chemical safety goggles. Full face shield.

Skin and Body Protection — Rubber gloves or other impervious gloves. Rubber footwear should be used. Safety shower recommended in all storage and handling areas.

Respiratory Protection — No special equipment typically needed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid		
Appearance	Clear Liquid	**Odor**	Mild acid/detergent
Color	Clear	**Odor Threshold**	N/A

Property	**Values**	**Remarks • Method**
pH	1.0 – 1.5	
Melting Point/Freezing Point	N/A	
Boiling Point/Boiling Range	N/A	
Flash Point	N/A	
Evaporation Rate	(Water = 1): 1	
Flammability (Solid, Gas)	N/A	
Upper Flammability Limits	N/A	
Lower Flammability Limit	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Specific Gravity	1.147	
Water Solubility	Completely soluble.	
Solubility in Other Solvents	N/A	
Partition Coefficient	N/A	
Auto ignition Temperature	N/A	
Decomposition Temperature	N/A	

10. STABILITY AND REACTIVITY

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid
Contact with alkaline materials, reactive metals, and direct sunlight.

Incompatible Materials
Reacts violently with strong alkalis, producing heat. Contact with many metals may result in severe corrosion attack of the metal and liberation of hydrogen gas. Strong acids, strong bases.

Hazardous Decomposition Products
Heating phosphoric acid to decomposition yields toxic phosphorous pentoxide fumes.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	Harmful if inhaled.
Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Ingestion	Can cause irritation and corrosive burns to mouth, throat, and stomach.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric Acid 7664-38-2	3500 mg/kg (rat)	>1260 mg/kg (rat)	-
Hydrochloric Acid 7647-01-0	900 mg/kg (rabbit)	-	1108 ppm (1 hour, mouse)

Information on Physical, Chemical and Toxicological Effects

Symptoms May cause eye burns and permanent eye damage. Prolonged contact may even cause severe skin irritation or mild burns. May cause irritation to the mucous membranes and upper respiratory tract.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by **ACGIH,** OSHA, IARC or NTP.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and Degradability Not Determined

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Bioaccumulation Not Determined

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Mobility Not Determined.

Other Adverse Effects. Not Determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Do not reuse container. Triple rinse empty container with water. Plastic containers may be offered for recycling. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Contaminated Packaging Do not reuse container. Triple rinse empty container with water. Plastic containers may be offered for recycling.

14. TRANSPORT INFORMATION

Note 4/Gal Cases: DOT Packaging Exceptions (49 CFR 173.154)
LTD, QTY.

DOT

UN/ID No	UN1805
Proper Shipping Name	Phosphoric Acid Solution
Hazard Class	8
Packing Group	III

IATA

UN/ID No	UN1805
Proper Shipping Name	Phosphoric Acid Solution
Hazard Class	8
Packing Group	III

DOT Quantity Limits Passenger Air	5 L
DOT Quantity Limits Cargo Air	60 L

IMDG

UN/ID No	UN1805
Proper Shipping Name	Phosphoric Acid Solution
Hazard Class	8
Packing Group	III
DOT Vessel Stowage Location	A – May be stowed “on deck” or “under deck” on a cargo & passenger vessel

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

CERCLA Reportable Quantity The following components are listed:

Chemical Name	CAS Number	CERCLA RQ
Phosphoric Acid	7664-38-2	5000 lbs.
Hydrochloric Acid	7647-01-0	5000 lbs.

SARA 313 No chemical (s) components of this product are subject to reporting levels established by SARA Title III, Section 313.

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric Acid 7664-38-2	X	X	X
Hydrochloric Acid 7647-01-0	X	X	X

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Reactivity**	**Special Hazards**
	2	0	0	Not Determined
HMIS	**Health Hazards**	**Flammability**	**Reactivity**	**Personal Protection**
	2	0	0	D

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet