

# Material Safety Data Sheet



KEYSTONE DELIMER

## Section 1. Chemical product and company identification

Trade name : KEYSTONE DELIMER  
Product use : Delimer  
Supplier : Ecolab Co.  
5105 Tomken Road  
Mississauga ON L4W 2X5  
1-800-352-5326  
Code : 948877-13  
Date of issue : 08-November-2005

EMERGENCY HEALTH INFORMATION: 1-800-328-0026  
Outside United States and Canada CALL 1-651-222-5352 (in USA)

## Section 2. Composition, Information on Ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
Phosphoric acid	7664-38-2	15 - 40
citric acid	77-92-9	5- 10

## Section 3. Hazards identification

Physical state : Liquid. (Liquid.)  
Emergency overview : DANGER!  
CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.  
HARMFUL IF SWALLOWED.  
Do not ingest. Do not get in eyes, on skin or clothing. Do not breathe vapour or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.  
Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion  
Potential acute health effects  
Eyes : Corrosive to eyes.  
Skin : Corrosive to the skin.  
Inhalation : Corrosive to the respiratory system.  
Ingestion : Harmful if swallowed. Causes burns to mouth, throat and stomach.

See toxicological Information (section 11)

## Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Obtain medical attention immediately.  
Skin Contact : In case of contact, immediately flush skin copiously with water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention immediately.  
Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention immediately.  
Ingestion : Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.

## Section 5. Fire fighting measures

<b>Auto-ignition temperature</b>	: Not available.
<b>Flash point</b>	: > 100°C
<b>Flammable limits</b>	
<b>Upper:</b>	Not available.
<b>Lower:</b>	Not available.
<b>Products of combustion</b>	: Not available.
<b>Fire-fighting media and instructions</b>	: Use an extinguishing agent suitable for surrounding fires.
	Dike area of fire to prevent product run-off.
	No specific hazard.
<b>Special protective equipment for fire-fighters</b>	: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Risks of explosion of the product in presence of mechanical impact: Not available.
	Risks of explosion of the product in presence of static discharge: Not available.

## Section 6. Accidental release measures

<b>Personal Precautions</b>	: Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas.
<b>Environmental precautions</b>	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
<b>Methods for cleaning up</b>	: If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.--

## Section 7. Handling and storage

<b>Handling</b>	: Do not ingest. Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapour or mist. Wash thoroughly after handling.
<b>Storage</b>	: Keep out of the reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 50°C

## Section 8. Exposure Controls, Personal Protection

<b>Engineering controls</b>	: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
-----------------------------	--

### Personal protection

<b>Eyes</b>	: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
<b>Hands</b>	: Use chemical resistant, impervious gloves.
<b>Skin</b>	: Use synthetic apron, other protective equipment as necessary to prevent skin contact.
<b>Respiratory</b>	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

### Name

Phosphoric acid

### Exposure limits

**ACGIH TLV (United States, 9/2004).**

STEL: 3 mg/m<sup>3</sup> 15 minute(s). Form: All forms

TWA: 1 mg/m<sup>3</sup> 8 hour(s). Form: All forms

## Section 9. Physical and chemical properties

Physical state	: Liquid. (Liquid.)
Colour	: Green. (Light.)
Odour	: Faint Odour
pH	: 2 (100%)
Boiling/condensation point	: Not available.
Melting/freezing point	: Not available.
Specific gravity	: 1.2 (Water = 1)
Vapour pressure	: Not applicable.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK <sub>ow</sub>	: Not available.
Solubility	: Easily soluble in cold water, hot water.

## Section 10. Stability and reactivity

Stability	: The product is stable.
Conditions of instability	: Not available.
Reactivity	: Highly reactive with alkalis.
Incompatibility with various substances	: Not available.
Hazardous Decomposition Products	: Not available.

## Section 11. Toxicological information

### Potential acute health effects

Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin.
Inhalation	: Corrosive to the respiratory system.
Ingestion	: Harmful if swallowed. Causes burns to mouth, throat and stomach.
Irritancy of Product	: Hazardous by WHMIS criteria.

### Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: No known significant effects or critical hazards.
Reproductive effects	: No known significant effects or critical hazards.
Sensitization to Product	: No known significant effects or critical hazards.
Synergistic Products (Toxicologically)	: Not available.

### Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Phosphoric acid	LD50	1530 mg/kg	Oral	Rat
	LD50	2740 mg/kg	Dermal	Rabbit
citric acid	LD50	5040 mg/kg	Oral	Mouse

Target organs	: Contains material which causes damage to the following organs: lungs, upper respiratory tract, skin, eye, lens or cornea.
---------------	---

## Section 12. Ecological information

Products of degradation	: These products are carbon oxides (CO, CO <sub>2</sub> ) and water, phosphates.
-------------------------	--

## Section 13. Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

## Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional Information
TDG Classification	UN1805	PHOSPHORIC ACID, LIQUID	8	III	<b><u>Explosive Limit and Limited Quantity Index</u></b> 5  <b><u>Passenger Carrying Road or Rail Index</u></b> 5

### APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

## Section 15. Regulatory information

**WHMIS** : Class E: Corrosive material.

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

## Section 16. Other information

**Date of issue** : 08-November-2005.  
**Responsible name** : Regulatory Affairs  
**Date of previous issue** : No Previous Validation.

### Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.