

**D-LIME SOLVENT Scale Remover**

Version Number: 1

Preparation date: 2005-08-20

1. PRODUCT AND COMPANY IDENTIFICATION	
<b>Product name:</b>	D-LIME SOLVENT Scale Remover
<b>MSDS #:</b>	MS0600149
<b>Product code:</b>	U23035
<b>Recommended use:</b>	Food Service .
<b>Manufacturer, importer, supplier:</b> Unisource Worldwide, Inc. 6600 Governors Lake Parkway Norcross, GA 30071 Phone: 770-447-9000 MSDS Internet Address: www.unisourcelink.com	
<b>Emergency telephone number:</b>	1-800-535-5053

2. HAZARDS IDENTIFICATION	
<b>EMERGENCY OVERVIEW</b>	
<ul style="list-style-type: none"> <li>• DANGER</li> <li>• CORROSIVE</li> <li>• CAUSES EYE AND SKIN BURNS</li> <li>• HARMFUL OR FATAL IF SWALLOWED</li> <li>• DO NOT MIX WITH AMMONIA, BLEACH OR OTHER CHLORINATED COMPOUNDS</li> </ul>	
<b>Principle routes of exposure:</b>	<ul style="list-style-type: none"> <li>• Eyes</li> <li>• Skin</li> <li>• Inhalation</li> </ul>
<b>Inhalation:</b>	• May cause irritation and corrosive effects to nose, throat and respiratory tract
<b>Ingestion:</b>	<ul style="list-style-type: none"> <li>• Corrosive</li> <li>• Causes burns to mouth, throat and stomach</li> </ul>
<b>Skin contact:</b>	<ul style="list-style-type: none"> <li>• Corrosive</li> <li>• May cause permanent damage</li> </ul>
<b>Eye contact:</b>	<ul style="list-style-type: none"> <li>• Corrosive</li> <li>• Causes permanent eye damage, including blindness</li> </ul>

3. COMPOSITION/INFORMATION ON INGREDIENTS
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**HAZARDOUS COMPONENTS**

Ingredient	CAS #	Weight %
Phosphoric acid	7664-38-2	10 - 30%
Hydrochloric acid	7647-01-0	1 - 5 %

**HAZARDOUS COMPONENTS**

Ingredient	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphoric acid	1.25 g/kg (rat)	2740 mg/kg (rabbit)	25.5 mg/m <sup>3</sup> (rat)
Hydrochloric acid	900 mg/kg (rabbit)	Not available	3124 ppm/1H (rat)

4. FIRST AID MEASURES	
<b>Eye contact:</b>	<ul style="list-style-type: none"> <li>• Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open</li> <li>• Get medical attention immediately</li> </ul>
<b>Skin contact:</b>	<ul style="list-style-type: none"> <li>• Flush immediately with plenty of water for at least 15 minutes</li> <li>• Get medical attention immediately</li> </ul>
<b>Inhalation:</b>	<ul style="list-style-type: none"> <li>• If breathing is affected, remove to fresh air</li> <li>• Get medical attention immediately</li> </ul>

<b>Ingestion:</b>	<ul style="list-style-type: none"> <li>• Do not induce vomiting</li> <li>• Immediately drink one cupful of water or milk</li> <li>• Never give anything by mouth to an unconscious person</li> <li>• Get medical attention immediately</li> </ul>
<b>Aggravated Medical Conditions:</b>	<ul style="list-style-type: none"> <li>• Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects</li> </ul>

### 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	<ul style="list-style-type: none"> <li>• The product is not flammable</li> <li>• Extinguish fire using agent suitable for surrounding fire</li> </ul>
<b>Specific hazards:</b>	Not applicable
<b>Unusual hazards:</b>	None known
<b>Specific methods:</b>	No special methods required
<b>Special protective equipment for firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
<b>Extinguishing media which must not be used for safety reasons:</b>	No information available

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Use personal protective equipment
<b>Environmental precautions and clean-up methods:</b>	<ul style="list-style-type: none"> <li>• Use appropriate containment to avoid environmental contamination</li> <li>• Soak up with inert absorbent material</li> <li>• Shovel into suitable container for disposal</li> </ul>

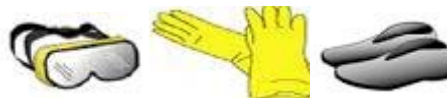
### 7. HANDLING AND STORAGE

<b>Handling:</b>	<ul style="list-style-type: none"> <li>• Avoid contact with skin, eyes and clothing</li> <li>• Do not taste or swallow</li> <li>• Avoid breathing vapors or mists</li> <li>• Use only with adequate ventilation</li> <li>• Remove and wash contaminated clothing and footwear before re-use</li> <li>• Wash thoroughly after handling</li> <li>• Product residue may remain on/in empty containers</li> <li>• All precautions for handling the product must be used in handling the empty container and residue</li> <li>• FOR COMMERCIAL AND INDUSTRIAL USE ONLY</li> </ul>
	FOR COMMERCIAL AND INDUSTRIAL USE ONLY
<b>Storage:</b>	<ul style="list-style-type: none"> <li>• Keep tightly closed in a dry, cool and well-ventilated place</li> <li>• Protect from freezing</li> <li>• Keep out of the reach of children</li> </ul>

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering measures to reduce exposure:</b>	<ul style="list-style-type: none"> <li>• Good general ventilation should be sufficient to control airborne levels</li> <li>• Respiratory protection is not required if good ventilation is maintained</li> </ul>
<b>Personal Protective Equipment</b>	
<b>Eye protection:</b>	<ul style="list-style-type: none"> <li>• Chemical splash goggles</li> </ul>
<b>Hand protection:</b>	<ul style="list-style-type: none"> <li>• Chemical resistant gloves</li> <li>• Includes</li> <li>• neoprene gloves</li> </ul>
<b>Skin and body protection:</b>	<ul style="list-style-type: none"> <li>• If major exposure is possible, wear suitable protective clothing and footwear</li> </ul>
<b>Respiratory protection:</b>	<ul style="list-style-type: none"> <li>• In case of insufficient ventilation wear suitable respiratory equipment</li> <li>• A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use</li> </ul>

<b>Hygiene measures:</b>	<ul style="list-style-type: none"> <li>• Keep away from food, drink and animal feeding stuffs</li> <li>• Handle in accordance with good industrial hygiene and safety practice</li> </ul>
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Ingredient	CAS #	ACGIH	OSHA	Mexico
Phosphoric acid	7664-38-2	3 mg/m <sup>3</sup> (STEL) 1 mg/m <sup>3</sup> (TWA)	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup> (STEL) 1 mg/m <sup>3</sup> (TWA)
Hydrochloric acid	7647-01-0	2 ppm (Ceiling)		7 mg/m <sup>3</sup> (Ceiling)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid	<b>Appearance:</b>	Aqueous solution
<b>Color:</b>	Dark Brown	<b>Odor:</b>	Acid
<b>Specific gravity:</b>	1.19	<b>pH:</b>	1.5
<b>Dilution pH:</b>	No information available	<b>Density:</b>	No information available
<b>Bulk density:</b>	No information available	<b>Vapor density:</b>	No information available
<b>Evaporation rate:</b>	No information available	<b>Solubility:</b>	Soluble
<b>VOC:</b>	0	<b>Viscosity:</b>	No information available
<b>Solubility in other solvents:</b>	No information available		
<b>Partition coefficient (n-octanol/water):</b>	No information available		
<b>Boiling point/range:</b>	Not determined		
<b>Melting point/range:</b>	Not determined		
<b>Flash point:</b>	>200 (°F)>99.3 (°C)		
<b>Decomposition temperature:</b>	Not determined		
<b>Autoignition temperature:</b>	No information available		

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	The product is stable
<b>Polymerization:</b>	Hazardous polymerisation does not occur
<b>Hazardous decomposition products:</b>	None reasonably foreseeable
<b>Materials to avoid:</b>	<ul style="list-style-type: none"> <li>• Strong oxidising agents</li> <li>• Bases</li> <li>• Do not mix with chlorinated products</li> </ul>

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity</b>	• Corrosive
<b>Component Information:</b>	See Section 3
<b>Chronic toxicity:</b>	None known
<b>Specific effects</b>	
<b>Carcinogenic effects:</b>	None known
<b>Mutagenic effects:</b>	None known
<b>Reproductive toxicity:</b>	None known
<b>Target organ effects:</b>	None known

### HAZARDOUS COMPONENTS

Ingredient	CAS #	NTP	IARC	OSHA
Hydrochloric acid	7647-01-0		Listed (Mist Only)	

## 12. ECOLOGICAL INFORMATION

<b>Environmental Information:</b>	• no data available
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**13. DISPOSAL CONSIDERATIONS****Waste from residues / unused products:**

- Undiluted product is regulated under environmental and transportation laws as a corrosive waste
- Dispose of according to all federal, state and local applicable regulations

**14. TRANSPORT INFORMATION****DOT/TDG:**

Please refer to the Bill of Lading/receiving documents for up to date shipping information

**15. REGULATORY INFORMATION****International Inventories**

All components of this product are listed on the following inventories: U.S.A. (TSCA).

**U.S. Regulations****California Proposition 65:** This product is not subject to the reporting requirements under California's Proposition 65**SARA 311/312 Hazard Categories**

<b>Immediate:</b>	Y
<b>Delayed:</b>	N
<b>Fire:</b>	N
<b>Reactivity:</b>	N
<b>Sudden Release of Pressure:</b>	N

**Canada****WHMIS hazard class:** Not for sale in Canada .**STATE RIGHT TO KNOW**

Ingredient	CAS #	NJRTK:	MARTK:	PARTK:	RIRTK:	ILRTK:	CTRTK:
Phosphoric acid	7664-38-2	Listed	Listed	Listed	Listed	Listed	Listed
Water	7732-18-5	-	-	-	-	-	-
Hydrochloric acid	7647-01-0	Listed	Listed	Listed	Listed	Listed	Listed

**CERCLA / SARA**

Ingredient	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Phosphoric acid	7664-38-2	10 - 30%	5000		
Hydrochloric acid	7647-01-0	1 - 5 %	5000	500	Listed.

Ingredient	CAA HAP	CAA ODS	CWA Priority Pollutants
Hydrochloric acid	Listed.		

**16. OTHER INFORMATION**

HMIS	Health	3	Fire Hazard	0	Reactivity	0
NFPA	Health:	3	Flammability:	0	Instability:	0

**Reason for revision:** Not applicable**Prepared by:** NAPRAC**Additional advice:** None

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