

## Material Safety Data Sheet

May be used to comply with  
OSHA's Hazard Communication Standard,  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements.

## U. S. Department of Labor

Occupational Safety and Health Administration  
(Non-Mandatory Form)

Form Approved

OMB No. 1218-0072

Identity (As used on Label and List)

UNLIME®

Note: Blank spaces are not permitted. If any item is not applicable, or no  
information is available, the space must be marked to so indicate.

### Section I

Manufacturer's Name

Dist. by A. O. Smith Water Products Co.

Emergency Telephone Number

(847) 564-2320

Address (Number, Street, City, State, and ZIP Code)

5621 W. 115th Street

Telephone Number for Information

(847) 564-2320

Alsip, IL 60803-5163

Date Prepared

12/1/1998

Signature of Preparer (optional)

### Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Phosphoric Acid	CAS #7664-38-2	1 Mg/M <sup>3</sup>	1 Mg/M <sup>3</sup>	

### Section III - Physical/Chemical Characteristics

Boiling Point

101° C

Specific Gravity (H<sub>2</sub>O = 1)

1.12 - 1.25

Vapor Pressure (mm Hg.)

Non-Volatile

Melting Point/Freezing Point

- 4.0° C. to - 19.0° C.

Vapor Density (Air = 1)

Non-Volatile

Evaporation Rate

Butyl Acetate = 1 Non-Volatile

Solubility in Water

100%

Appearance and Odor

Red Colored, Odorless Solution

### Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)

Non - Combustible

Flammable Limits

Not Applicable

LEL

UEL

Extinguishing Media

Not Applicable

Special Fire Fighting Procedures

Use full protective clothing and self contained breathing apparatus.

Unusual Fire and Explosion Hazards

Under fire conditions, may decompose to emit irritating phosphorous oxide fumes.

Contact with common metals produces hydrogen which may form flammable mixtures with air.

## Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	
Incompatibility (Materials to Avoid) Contact with reactive metals (Ex. Mild Steel, Magnesium, Aluminum Zinc, Etc.) Produces Hydrogen Which May Form Flammable Mixtures With Air. Highly Reactive With Strong Bases. At Flame Temperature, Will Emit Phosphorous Oxide Fumes.			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

## Section VI - Health Hazard Data

Route(s) of Entry	Inhalation?	Irritant	Skin?	Irritant	Ingestion?	Slightly Hazardous
Health Hazards (Acute and Chronic) Phosphoric Acid is the least corrosive of the common mineral acids. It is completely and rapidly soluble in water. If exposed areas are flushed properly and thoroughly with water there should be no harm. Longer term exposure may lead to rash or burns.						
Carcinogenicity	NTP	NO	IARC Monographs	N(1)	OSHA Regulated	NO
FDA GRAS List, Permitted in Food 116.4						
Signs and Symptoms of Exposure Respiratory, Skin and/or Eye Irritant						
Medical Conditions						
Generally Aggravated by Exposure None Known						
Emergency and First Aid Procedures (1) Eyes: Flush with copious water for at least 15 minutes. If irritation persists Get Medical Attention. (2) Skin: Wash off with water. If irritation persists, Get Medical Attention. (3) Inhalation: Remove from exposure. If breathing is difficult or discomfort persists, Get Medical Attention. (4) Ingestion: Rinse mouth with water, give copious water to cause dilution in stomach. Do not cause vomiting. Get Medical Attention.						

## Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled	Neutralize spill area with soda ash & then flush with copious amounts of water. Adequate ventilation required if vapor or mist conditions exist.
Waste Disposal Method	According to Local, State & Federal Regulations.
Precautions to Be Taken in Handling and Storing	Store in cool, dry, well ventilated location. Store in suitable containers (ex.) glass, fiberglass, reinforced plastic, poly. lined drums, type 316 stainless steel etc.)
Other Precautions	Do not store in reactive metal containers (ex. mild steel, aluminum, etc.)

## Section VIII - Control Measures

Respiratory Protection (Specify Type) For exposure to severe mist or vapor, use NIOSH/MSHA Acid Gas Respirator with Facepiece.

Ventilation	Local Exhaust	Special
	Mechanical (General) Adequate Ventilation	Other
Protective Gloves	Neoprene or Rubber	Eye Protection Chemical Type Goggles

Other Protective Clothing or Equipment Uniforms, Coveralls or Lab Coats

Work/Hygienic Practices Avoid Contact with Skin, Eyes & Mucous Membranes.