

Amber Chemical

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: PHOSPHORIC ACID, 40%

Date: 08/01/2007

Company Information:

Amber Chemical, Inc.
5201 Boylan Street
Bakersfield, CA 93308
661-325-2072

For Chemical Emergency, spill, leak, fire, exposure, accident call Chemtrec – day or night 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS No.</u>	<u>Concentration</u>	<u>Units</u>
Phosphoric Acid	7664-38-2	40%	%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Form: liquid
Color: water white
Odor: odorless

WARNING STATEMENTS

DANGER!
Causes burns

POTENTIAL HEALTH EFFECTS

Likely routes of exposure:	Eye and skin contact
Eye contact:	Corrosive. Causes tissue destruction, permanent damage to the cornea, blindness
Skin contact:	Causes irritation, burns.
Inhalation:	Mists may cause lung irritation, shortness of breath, fluid in lungs.
Ingestion:	Can cause nausea, vomiting, diarrhea, corrosion, burns to mouth and esophagus, abdominal pain, chest pain, shortness of breath, seizures, death. Refer to Section 11 for toxicological information.

4. FIRST AID MEASURES

If in eyes:	Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses. Get immediate medical attention. If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.
If on skin:	Immediately wipe excess material off skin with a dry cloth; then wash skin with plenty of soap and water for at least 15 minutes. Seek medical attention. Remove contaminated clothing and shoes while washing. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned.
If inhaled:	Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek immediate medical attention.
If swallowed:	If victim is conscious and alert, give 2-3 glasses of water to drink and do not induce vomiting. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:

This material is an acid. The primary toxicity of this product is due to its irritant effects on mucous membranes.

INHALATION: If cough or shortness of breath occurs, evaluate the possibility of bronchitis or pneumonitis. Chest x-ray and arterial blood gases can be used to determine the presence of pulmonary edema. In severe cases, use of humidified oxygen and assisted ventilation including positive end expiratory pressure (PEEP) may be needed. Parenteral steroids may be useful in limiting the extent of pulmonary damage.

SKIN: Wash exposed area thoroughly with soap and water. Chemical burns from strong acids are generally treated the same as thermal burns.

EYES: Irrigate eyes for 15 minutes with sterile saline. If irritation, pain, swelling, photophobia or lacrimation persist, examination by an ophthalmologist is recommended.

INGESTION: If not already performed by first aid personnel, irrigate mouth with large amounts of water and dilute the acid by having victim drink 4 to 8 ounces of water or milk. **DO NOT** induce vomiting. Use of gastric lavage is controversial. The advantage of removal of acid must be weighted against the risk of perforation or bleeding. If a large amount of acid (> 1-ml/kg body weight) has been recently ingested, cautious gastric lavage is generally advised if the patient is alert and there is little risk of convulsions. Consultation with a gastroenterologist and/or surgeon is advised. Serious complications such as perforation or stricture of the esophagus may occur requiring care by specialists. Laryngeal edema may develop requiring intubation or tracheostomy.

5. FIRE FIGHTING MEASURES

Flash point:	Non flammable aqueous solution
Hazardous products of combustion:	Phosphorus oxides (P _x O _y)
Extinguishing media:	Water spray, foam, dry chemical, or carbon dioxide
Unusual fire and explosion hazards:	Not combustible.
Fire fighting equipment:	Firefighters should wear self-contained breathing apparatus and full protective clothing. Equipment should be thoroughly decontaminated after use.
Special Procedures:	Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protection recommended in section 8.
Environmental precautions:	Runoff from fire control or dilution water may cause pollution. Large spills should be handled according to a predetermined plan. Keep out of drains and water courses.
Methods for cleaning up:	Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Carefully neutralize spills with soda ash and then place in a chemical waste container. Exercise caution during neutralization as considerable heat may be generated.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

7. HANDLING AND STORAGE

Handling

Avoid contact with eyes, skin and clothing.

Avoid breathing vapors and mists. Do not ingest. This product reacts violently with bases liberating heat and causing spattering.

Wash thoroughly after handling.

Emptied containers retain vapor and product residue. Observe all recommended safety precautions until container is cleaned, reconditioned or destroyed. The reuse of this material's container for non industrial purposes is prohibited and any reuse must be in consideration of the data provided in this material safety data sheet.

<u>Storage</u>	
Recommended maximum shelf life:	> 24 Months
Temperature:	> 21 C
General:	Stable under normal conditions of handling and storage. Keep in a cool, dry, well ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection:	Wear splash proof chemical goggles. Face contact should be prevented through use of a face shield. Have eye flushing equipment available.
Hand protection:	Wear chemical resistant gloves.
Body protection:	Wear suitable long sleeved protective clothing. Consult the glove/clothing manufacturer to determine the appropriate type glove/clothing for a given application. Wear full protective clothing if exposed to splashes. Wash contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash thoroughly after handling.
Respiratory protection:	Avoid breathing vapor or mist. Use approved respiratory protection equipment when airborne exposure is excessive. If used, full facepiece replaces the need for face shield and/or chemical goggles. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. The respirator use limitations specified by the manufacturer must be observed.
Ventilation:	Provide natural or mechanical ventilation to minimize exposure. Use local mechanical exhaust ventilation at sources of air contamination.

Airborne exposure limits: (ml/m³ = ppm) - No occupational exposure limit has been established.

PHOSPHORIC ACID

	Notes	TWA	STEL
AIHA		1 mg/cu m	3 mg/cu m
OSHA		1 mg/cu m	3 mg/cu m

Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.255
pH:	< 1.0 (1% solution)
Boiling point :	> 158 C

Freezing point : 21 C
Vapor pressure 2.16 mm Hg @ 20C
Water solubility: completely miscible

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10. STABILITY AND REACTIVITY

Conditions to avoid: None known
Materials to avoid – Contact with strong oxidizing agents.
Hazardous reactions: Fluorine, strong reducing agents, bases, metals,
sulfur trioxide, phosphorus pentoxide
Hazardous decomposition products: Phosphorus oxides (P_xO_y)

11. TOXICOLOGICAL INFORMATION

This product has been tested for toxicity. Results from studies or from the available public literature are described below.

Acute animal toxicity data

Oral: LD50 , rat, 1530 mg/kg.
Dermal: LD50 , rabbit, > 2740 mg/kg, rabbit.
Eye irritation: Rabbit , eye irritation, 119 mg. Severely irritating.
eye irritation, rabbit. Corrosive.
Acute Respiratory Irritation: No test data found for product.
Acute Inhalation Toxicity: No test data found for product
Skin irritation: Rabbit , skin irritation, 595 mg/24 hr, rabbit. Severely irritating.
Skin irritation, rabbit. Corrosive. (At 24 hours).
Carcinogenicity: Not carcinogenic
Mutagenicity: Not mutagenic

12. ECOLOGICAL INFORMATION

Environmental Toxicity:

Fish: LC50 - lethal concentration 50% of test species, 138 mg/l/96 hr, fish:
Mosquitofish. Practically nontoxic.

Environmental fate: No specific biodegradation test data located. While acidity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.

13. DISPOSAL CONSIDERATIONS

US EPA RCRA Status: This material when discarded is a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. See disposal considerations below for U.S. EPA disposal requirements. Consult regulatory officials for performance standards.

US EPA RCRA
Hazardous waste code: C Compound/Characteristic: Corrosivity

Miscellaneous advice: Local, state, and federal disposal regulations may be more or less stringent. Consult appropriate regulatory officials for information on disposal of the product. This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

US DOT

Proper shipping name: Phosphoric Acid
Hazard Class: 8
Hazard identification number: UN1805
Packing Group: Packing Group III
Transport label: Corrosive

15. REGULATORY INFORMATION

All components are on the following U.S. TSCA, Canadian DSL, EU EINECS, Japanese ENCS, inventories: ENCS, Australian AICS, Korean, Philippine PICCS, Chinese (Draft)

SARA Hazard Notification:

Hazard Categories Under Title III Acute health hazard
Rules (40 CFR 370):

Section 302 Extremely Hazardous Substances: N/A

Section 313 Toxic Chemical(s): N/A

CERCLA Reportable Quantity: 5,000 lb.

Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

16. OTHER INFORMATION

	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	2	0	0	
Suggested HMIS Rating:	3	0	0	

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