

Chemical Name	Cas No.	Percentage	Chemical Name	Cas No.	Percentage
Phosphoric Acid	7664-38-2	13.8%	2 Butoxyethanol	11-76-2	18%

SECTION IV – FIRST AID MEASURES

- Inhalation:** Administer oxygen if breathing is difficult. Do not use mouth to mouth method if victim inhaled the substance. Give artificial respiration with a pocket mask with a one way valve. Move victim to fresh air.
- Eye Contact:** Check for/remove contact lenses if easy to do. Flush eyes with cool, clean, low pressure water for at least 15 minutes while occasionally lifting and lowering eyelids. Do not use eye ointment unless directed by a physician. Seek medical attention.
- Skin contact:** Remove contaminated shoes and clothing. Flush affected area with large amounts of water. Wash infected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or in pain or irritation persists.
- Ingestion:** DO NOT INDUCE VOMITING. Give 2-3 glasses of water if victim is alert and conscious. Obtain medical advice immediately. Do not give mouth to mouth except with a pocket respirator. Do not leave victim unattended. Lay victim on side to prevent aspiration. Avoid contact with contaminated clothing and vomitus. Wear impervious gloves while decontaminating clothing and hair.

SECTION V – FIRE FIGHTING MEASURES

Flash Point	N/A	Boiling Point	Approximately 212°F (100°C)
Lower Flammable Limit	N/A	Upper Flammable Limit	N/A
Auto ignition Temp	N/A		

Material is generally not flammable or combustible.

Hazardous Decomposition or Byproducts: May decompose in a fire to toxic and corrosive fumes. Fire fighters should use SCBA with a full face piece operated in positive pressure mode.

Extinguishing Media: Small Fires: Use dry chemicals, carbon dioxide, foam, water fog, or inert gas (nitrogen)
Large Fires: Use foam, water fog or water spray. Water may be ineffective. Water may not extinguish the fire. Water fog and spray are effective in cooling containers and adjacent structures. However, water can be used to cool the external walls of vessels to prevent excessive pressure, auto ignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:	Use Personal protective Equipment Ensure Adequate Ventilation Evacuate personnel to safe areas Material can create slippery conditions
Environmental Precautions:	Stop Leak Dike around spills, prevent material from entering sewers, drains and bodies of water
Method for containment	Use absorbent pads and dikes
Cleanup	Neutralize spill area with soda ash, lime or sodium bicarbonate. Flush neutralized material with copious amounts of water.

SECTION VII – HANDLING AND STORAGE

Handling: Do not get on skin, hands or clothing. Avoid breathing mists or vapors. Do not ingest. Dispose of all empty containers in accordance with federal, state and local regulations.

Storage: Store in a cool, dry well ventilated area. Keep containers tightly closed. Do not store this material in unlabeled containers.

SECTION VIII – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingredient	ACGIH TWA	OSHA PEL	NIOSH REL	NIOSH Ceiling
Phosphoric Acid	1 mg/m3	1 mg/m3		1 mg/m3
2-Butoxyethanol	20 ppm (8 hr)	50 ppm (240mg/m3)		

Engineering Controls: Use with adequate ventilation.

Personal Protective Equipment: Personal protective equipment should be used when working with this material in a typical outdoor work environment.
Breathing – Breathing apparatus is generally not needed.
Eye Protection – Safety glasses with side shield are recommended as minimum protection.
Hand Protection – Avoid skin contact, use rubber nitrile gloves and wash hands with soap and water before eating or drinking. Wash with soap and water.
Body Protection - Avoid skin contact, change contaminated clothing immediately.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Liquid	Vapor Pressure (mm Hg at 20 C)	<2 mm Hg @ 20 C
Odor	Slight	Upper/Lower Flammability	N/A
Boiling Point	>212 °F (100 C)	Water Soluble	Yes
Flash Point	N/A	Viscosity	Water thin
Density	10.5 – 11.5 lb/gal	Auto ignition temp	N/A
Freeze point	0°F	pH	0-1
Vapor Density	Not Available	Evaporation Rate	Water

SECTION X – STABILITY AND REACTIVITY

Chemical Stability: Stable Hazardous Polymerization: will not occur

Conditions to avoid: None known

Material Incompatibility: Strong oxidizing agents, strong reducing agents, bases and certain metals.

Hazardous Decomp. Oxides of Phosphorous

SECTION XI – TOXICOLOGICAL INFORMATION

This material is an acid. The primary effects and toxicity of this material is due primarily to its corrosive nature.

Information on likely routes of exposure:
 Inhalation, Ingestion, Eye Contact, Skin Contact, Skin absorption

Carcinogenicity: No data available to indicate product or any components present at greater than 0.1% cause cancer.
 Mutagenicity: No data available to indicate product or any components present at greater than 0.1% cause mutation.
 Reproductive: No data available to indicate product or any components present at greater than 0.1% may be reproductive toxicity.
 Teratogenicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Toxicity: Dermal, Skin Corrosion 1B
 Data Causes severe burns and eye damae
 Eye, can cause permanent damage to cornea, may cause blindness
 Ingestion, burns to mouth and esophagus, abdominal pain, chest pain, nausea, vomiting, diarrhea, seizures.
 Inhalation, Aspiration can cause severe pulmonary complications

SECTION XII –ECOLOGICAL INFORMATION

Duration	Test	Species	Concentration/Conditions
96 hr	LC50	<i>Fish: Mosquitofish</i>	138 mg/L
96 hr	LC50	<i>Oncorhynchus mykiss (Rainbow Trout)</i>	>100mg/L
48 hr	EC50	<i>Daphnia Magna (Water Flea)</i>	>100mg/L

Persistence and Degradability: Dispersed material is readily neutralized, but phosphoric byproducts may remain
 Bioaccumulation Potential: Not Available
 Soil Mobility: Not Available
 Other Adverse Effects: Not Available


SECTION XIII- DISPOSAL CONSIDERATIONS

Please check with local and state agencies to determine proper disposal of unused or unwanted product. It is the responsibility of the user to determine the proper transportation and disposal for unused material. Conditions of this product may change which could cause this material to be classified as hazardous at the time of disposal. All waste must be conducted in accordance with RCRA regulations. Contact your local EPA office for assistance.

Do not re-use empty containers

SECTION XIV – TRANSPORTATION INFORMATION

The shipping description below may not represent requirements for all modes of transportation and shipping methods or locations outside the United States.

Regulatory	UN Number	Shipping name	Hazard Class	Packing Group	Placard
U.S. DOT	1760	Corrosive Liquid, Phosphoric Acid	Corrosive 8	III	
IATA	1760	Corrosive Liquid, Phosphoric Acid	Corrosive 8	III	
IMDG	1760	Corrosive Liquid, Phosphoric Acid	Corrosive 8	III	

SECTION XV – REGULATORY INFORMATION

SARA Acute	Phosphoric Acid 7664-38-2	Canada DSL, China, EU EINECS, New Zealand, Philippines, TSCA
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Thailand - Environment - Quantities Phosphoric Acid 1 mg/m3
 US CERCLA? Hazardous reporting 5000 lb final

Remarks:

SECTION XVI – OTHER INFORMATION

US NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0
 HMIS Ratings: Health: 1 Fire: 0 Physical Hazards: 2

Revision information:

Disclaimer of Liability

The information in this SDS was obtained from sources which we believe are reliable, however, the information is provided without any warranty, expressed or implied regarding its correctness. This SDS was prepared and is to be used only for this product. Information given is designed to provide guidance for safe handling, use, storage, transportation, disposal and release and is not to be considered as a warranty or specification.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge, for this and other reasons we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage or disposal of the product.