

Material Safety Data Sheet

Trade Name: Purified Phosphoric Acid
Registration No: None

Section 1 Chemical Product and Company Information

Manufacturer or Formulator: OUACHITA Fertilizer Company
P.O. Box 4540

Monroe, Louisiana 70121

Emergency Phone - Chemtrec: 1-800-424-9300

Product Name: 0-55-0 Clear Phosphoric Acid
Common Name: Phosphoric Acid

Chemical Type: Phosphoric Acid

Section 2 Composition / Formulation Ingredients

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT% Hazardous	TLV	PEL
Ortho Phosphoric Acid	7664-38-2	H3P04	75%	1 mg/m3 3 mg/m3 STEL	1 mg/m3
Inert Ingredients			25%		

Section 3 Hazards Identification

Ingestion: Ingestion may result in irritation and burning of mucous membranes and/or gastrointestinal tract.
Inhalation: Inhalation of acid mist may produce mild to severe irritation of respiratory tract. Some rail cars of Phosphoric acid may have an off gas of chlorine. Follow proper unloading procedures on this sheet under section 7 to eliminate possible exposure.
Eye Contact: Will produce severe irritation. Prolonged contact may result in burn to eye causing permanent damage.
Skin Absorption: May produce mild to severe irritation. Prolonged contact may result in chemical burns.
Skin Contact: May produce mild to severe irritation. Prolonged contact may result in chemical burns.
Effects of Overdose: Severe conjunctivitis which may result in permanent damage. Can result in nausea and vomiting with severe abdominal pain. Prolonged contact with acid mist can result in severe respiratory irritation.

Section 4 First Aid Measures

Ingestion: Dilute with 2-3 glasses of milk or water. Do not induce vomiting. Consult a physician immediately.
Inhalation: Remove person to fresh air. If person is not breathing, perform artificial respiration if properly trained. Seek medical attention immediately.
Eyes: Promptly flush eyes with clean, cool water for at least 15 minutes. Contact a physician immediately.
Skin: Promptly remove contaminated clothing and rinse area with clear water for 15 minutes.

Section 5 Fire Fighting Measures

Extinguishing Media Non-flammable. Use media suitable to extinguish source of fire.
Special Fire Fighting Procedures: When phosphoric acid mists from hot fires may be encountered, self-contained breathing apparatus (SCBA) should be worn.
Unusual Fire and Explosion Hazards: Not listed

Section 6 Accidental Release Measures

Environmental Precautions: Low toxicity to aquatic life. Do not contaminate any watercourse or other body of water by direct application, disposal, or cleaning of equipment.
Steps to be taken in case material is released or spilled:
Dike around spill for containment and recover for re-processing. Small spills can be safely neutralized with limestone or soda ash. Caustic soda should be avoided because of excessive reactivity.

Section 7 Handling and Storage

Precautions to be taken in handling and storing:
When unloading a rail car always open vent valve on top of rail car before opening dome and let sit an adequate amount of time to mitigate possible exposure to any off gas of chlorine. Always wear proper protective equipment. Avoid storage and/or transfer in tanks, lines and other equipment constructed or materials not specifically designed and approved for phosphoric acid service. Avoid freezing weather below 1°F. Have adequate first aid water available.

Section 8 Exposure Controls / Personal Protection

Ventilation Protection: General area ventilation
Respiratory Protection: Approved respirators suitable for protection against acid mists and vapors. Not required for normal work procedures, but if misting occurs and always during unloading, use a high efficiency particulate respirator or self-contained breathing apparatus, with a full face shield when exposed above the TLV. Check with respirator manufacturer to determine the appropriate type of equipment for a given application.
Protective Clothing: Rubber clothing, chemical gloves, footwear and chemical hat or hood suitable for protection against acids.
Eye Protection: Tight sealing splash proof goggles.
Other: Eyewash and safety shower in work areas.

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Section 9

Physical and Chemical Properties

Boiling Point:	Approx. 270F @ 1 atmosphere	Solubility in Water:	Complete
Specific Gravity:	1.67 – 1.70	% Volatiles (by volume):	<1.0
Flashpoint:	Not applicable	Vapor Pressure, mm Hg:	2-8 @ 77°F
pH:	Strongly acidic; <2.0	Reaction with Water:	Exothermic, produces heat.

Appearance: Clear to pale yellow, orless when cold, pungent when hot
Extinguishing Media: Non-flammable Use media suitable to extinguish source of fire.

Section 10

Stability and Reactivity

Stability (Normal Conditions): Stable
Conditions to Avoid: Avoid contact with strong alkalis or metals other than certain stainless steels.
Incompatibility (Material to Avoid): Reacts violently with strong alkalis producing heat. Contact with many metals may result in severe corrosion attack of the metal and liberation of hydrogen gas.
Hazardous Decomposition Products: High temperatures will liberate phosphorus oxides
Hazardous Polymerization: Will not occur

Section 11

Toxicology Information

Acute Oral Toxicity: LD50 (rat) is greater than 1,530 mg/kg; not acutely toxic by oral exposure (TFI Product Testing Results, OECD Guideline 425)
Acute Dermal Toxicity: LD50 (rat) is greater than 3,160 mg/kg (ppm); not acutely toxic by dermal exposure. (TFI Product Testing Results, OECD Guideline 402).
Acute Inhalation Toxicity: LC50 (guinea pig, mouse, rat, rabbit) is 61-1,689 mg/m³; highly toxic by inhalation. (TFI Product Testing Results)
Acute Fish Toxicity: 96-hour LC50 is 3.0-35 mg/L (ppm); moderate toxicity to aquatic organisms (TFI Product Testing Results, OECD Guideline 203).

Section 12

Ecological Information

None Listed

Section 13

Disposal Considerations

Waste Disposal Procedures: Collect and reprocess where possible Following neutralization with limestone or soda ash, consult local, state and federal regulations before final disposal

Section 14

Transport Information

Shipping Name:	RQ Phosphoric Acid, 8, UN1805, PG III	C.A.S. Number:	7664-38-2
Hazard Class:	8	D.O. T. Number:	UN1805
Reportable Quantity (RQ):	5000 lbs.	Haz Waste No:	0002
Labels Required:	Corrosive	EPA Regist No:	None
Placard:	Corrosive		
Packaging Group:	III		

Refer to 49 CFR 172.101 Hazardous Material Table for further provisions, packaging authorizations and quantity limitations.

Section 15

Regulatory Information

Carcinogenicity: by IARC?: Yes () No (X) by NTP?: Yes () No (X)

This product contains phosphoric acid, CAS No 7664-38-2, which is subject to the reporting requirements of section 313 of Title III of the Superfund Amendments Act of 1986 and 40 CFR Part 372.

Section 16

Other Information

Flash Point (Test Method):	Non-flammable	Flammable Limits	LOWER	UPPER
Autoignition Temperature:	Not applicable	(% BY VOLUME)	N/A	N/A
Hazard Rating (N.F.P.A.):	Health: 2	Fire: 0	Reactivity: 0	Specific: Not applicable

This N.F.P.A. rating is a recommendation by the manufacturer using the guidelines or published evaluations prepared by the National Fire Protection Association (N.F.P.A.).

MSDS Version Number: 1

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