

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Phosphoric Acid 20% Food Grade

**Synonyms:** Phosphoric acid, ORTHOPHOSPHORIC ACID, o-Phosphoric acid, Wc-reiniger, Acidum phosphoricum

**CAS Number:** 7664-38-2

**Grade/Purity:** Food

**Product Type:** Acids

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)

**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

H314	Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]
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**Precautionary Statements:**

P260,	P264, P280, P301+P330+P331, P302+P361+P354, P304+P340, P305+P354+P338, P316, P321, P363, P405, and P501
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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	FORMULA	MOLECULAR WEIGHT	CONCENTRATION
Phosphoric Acid	7664-38-2	H <sub>3</sub> O <sub>4</sub> P	97.995 g/mol	20%
Water	7732-18-5	H <sub>2</sub> O	18.02 g/mol	80%

### 4. FIRST-AID MEASURES

<b>Eyes</b>	Eye: IRRIGATE IMMEDIATELY - If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.
<b>Skin</b>	Wear protective gloves when administering first aid. Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer immediately for medical attention .
<b>Inhalation</b>	Breathing: RESPIRATORY SUPPORT - If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.
<b>Ingestion</b>	Swallow: MEDICAL ATTENTION IMMEDIATELY - If this chemical has been swallowed, get medical attention immediately. (NIOSH, 2024)

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Media</b>	Dry chemical, CO <sub>2</sub> , water spray. Use water spray to cool containers.
<b>Unsuitable Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protective Equipment</b>	Wear self-contained breathing apparatus and full protective clothing.
<b>Combustion Products</b>	May include carbon oxides and other toxic fumes. See Section 10.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental</b>	Prevent leakage or spillage from entering drains, sewers, or waterways.
<b>Containment &amp; Cleanup</b>	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

## 7. HANDLING AND STORAGE

<b>Safe Handling</b>	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
<b>Safe Storage</b>	Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from: PHOSPHORIC ACID reacts exothermically with bases. May react with active metals, including such struc. Keep containers tightly closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

AGENCY	EXPOSURE LIMIT
OSHA PEL	1.0 [mg/m <sup>3</sup> ]
NIOSH REL	1 mg/m <sup>3</sup>
IDLH	1000.0 [mg/m <sup>3</sup> ]

<b>Eyes</b>	Wear chemical safety goggles or face shield.
<b>Skin</b>	Wear chemical-resistant gloves and protective clothing.
<b>Inhalation</b>	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, colorless liquid
<b>Odor</b>	Odorless
<b>pH</b>	pH = 1.5 (0.1 N aqueous solution)
<b>Melting Point</b>	21°C (pure)
<b>Boiling Point</b>	158°C (85%)
<b>Flash Point</b>	Not Available
<b>Vapor Pressure</b>	0.03 mmHg (NIOSH, 2024)
<b>Specific Gravity</b>	1.117
<b>Solubility</b>	Fully miscible with water
<b>Molecular Formula</b>	H <sub>3</sub> O <sub>4</sub> P
<b>Molecular Weight</b>	97.995 g/mol

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Reactions</b>	None under normal processing conditions.
<b>Conditions to Avoid</b>	Heat, sparks, open flame, and incompatible materials.
<b>Incompatible Materials</b>	PHOSPHORIC ACID reacts exothermically with bases. May react with active metals, including such structural metals as aluminum and iron, to release hydrogen, a flammable gas. Can initiate the polymeriza
<b>Decomposition Products</b>	May produce carbon oxides and other toxic fumes when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** See Section 2 for GHS hazard classification.

<b>IARC</b>	Not listed as carcinogen.
<b>NTP</b>	Not listed as carcinogen.
<b>OSHA</b>	Not listed as carcinogen.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Data not available. Avoid release to the environment.
<b>Persistence</b>	Not Available
<b>Bioaccumulation</b>	Not Available
<b>Mobility in Soil</b>	Not Available

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

## 14. TRANSPORT INFORMATION

<b>US DOT</b>	UN1805, PHOSPHORIC ACID SOLUTION, 8, PG III
<b>IMDG</b>	UN1805, PHOSPHORIC ACID, SOLUTION, 8, PG III, Tunnel (E)
<b>IATA/ICAO</b>	UN1805, PHOSPHORIC ACID SOLUTION, 8, PG III Passenger: 5 L (PI 852); Cargo only: 60 L (PI 856)
<b>Marine Pollutant</b>	No

## 15. REGULATORY INFORMATION

<b>TSCA Inventory</b>	All ingredients are listed on the TSCA Active inventory.
<b>California Prop 65</b>	Refer to California Proposition 65 list for current status.
<b>SARA 311/312</b>	See Section 2 for hazard classifications.
<b>SARA 313</b>	Refer to EPA Toxic Release Inventory for current listing status.

## 16. OTHER INFORMATION

**Revision Date:** 02/10/2026

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