Safety Data Sheet

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Phosphoric Acid, 70% w/w

Product Number: CP223800
Other Identifying Product Numbers: P-2238, P-2238-500ML

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Reagents Inc.

Address: 4746 Sweden Road
Charlotte, NC 28224 USA
Telephone: 800-732-8484

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300
CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

Hazard Class	Category	Hazard Statement	Precautionary Statements
Skin Corrosion / Irritation	Category 1	H314	P260, P264, P280, P301+P330+P331, P303+P361+P353, P363, P304+P340, P310, P321, P305+P351+P338, P405, P501
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Corrosive to Metals	Category 1	H290	P234, P390, P406

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2.2. GHS Label Elements

Pictograms:

Signal Word: **Danger**

Hazard Statements:

Hazard Number	Hazard Statement
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Precautionary Statements:

Precautionary Number	Precautionary Statement
P234	Keep only in original container.
P260	Do not breathe dust, fumes or mist.
P264	Wash arms, hands and face thoroughly after handling.
P280	Wear protective gloves and eye protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P406	Store in corrosive resistant container with a resistant inner liner.

2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Phosphoric Acid	H_3PO_4	97.99 g/mol	7664-38-2	70.08%
Water	H_2O	18.01 g/mol	7732-18-5	29.92%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation to areas of contact.

4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Not considered to be a fire or explosion hazard.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Wear protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

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SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Phosphoric Acid (7664-38-2)	TWA	USA	1 mg/m³ TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Phosphoric Acid (7664-38-2)	TLV-STEL	USA	3 mg/m³ STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Phosphoric Acid (7664-38-2)	TLV-TWA	USA	1 mg/m³ TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: No specific controls are needed. Normal room ventilation is adequate

Skin Protection: Wear protective gloves and eye protection.

Eye Protection: Wear protective gloves and eye protection.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance:	Colorless
Physical State:	Liquid
Odor:	Odorless
Odor Threshold:	Not applicable
pH:	< 2
Melting/Freezing Point:	Approximately -17°C
Initial Boiling Point /Range:	Approximately 132°C -
Flash Point:	Not applicable
Evaporation Rate:	Data not available
Flammability:	Not applicable
Flammability/Explosive Limits:	Data not available.
Vapor Pressure:	Data not available
Vapor Density:	Data not available
Relative Density:	1.53
Solubility:	Miscible
Partition Coeffieient (n-Octanol/Water):	Data not available
Auto-Ignition Temperature:	Not applicable
Decomposition Temperature:	Data not available
Viscosity:	Data not available
ExplosiveProperties:	Data not available.
Oxidizing Properties:	Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Keep only in original container.

10.4. Hazardous Decomposition Products

May emit irritating fumes when heated to decomposition.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

Data not available.

Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

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Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Not applicable.

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

UN Number: UN1805

Proper Shipping Name: Phosphoric Acid solution

Hazard Class: 8

Packing Group: III

Hazard Placard Labels:

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14.2. Transportation by Air - International Air Transport Association (IATA)

UN Number: UN1805

Proper Shipping Name: Phosphoric Acid solution

Hazard Class: 8

Packing Group: III

Hazard Placard Labels:

SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Phosphoric Acid (CAS # 7664-38-2): 5000 lb final RQ; 2270 kg final RQ

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

15.5. Massachusetts Right-to-Know Substance List

Phosphoric Acid (CAS # 7664-38-2): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Phosphoric Acid (CAS # 7664-38-2): Environmental hazard
Phosphoric Acid (CAS # 7664-38-2): Present
Water (CAS # 7732-18-5): Present

15.7. New Jersey Worker and Community Right-to-Know Components

Phosphoric Acid (CAS # 7664-38-2): corrosive
Phosphoric Acid (CAS # 7664-38-2): sn 1516

15.8. California Proposition 65

Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Phosphoric Acid (CAS # 7664-38-2): Present
Water (CAS # 7732-18-5): Present

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15.10. United States of America Toxic Substances Control Act (TSCA) List

Phosphoric Acid (CAS # 7664-38-2): Present
Water (CAS # 7732-18-5): Present

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage.

Keep only in original container. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

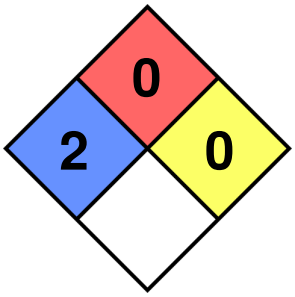
Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.
Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.
Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 2
Flammability: 0
Reactivity: 0
Special Hazard:



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16.4. Document Revision

Last Revision Date: 4/29/2020

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and REAGENTS, INC. assumes no legal responsibility or liability whatsoever resulting from its use.