



Contact: [sales@camachem.com](mailto:sales@camachem.com)

## Material Safety Data Sheet (MSDS)

Section 1: Chemical Product and Company Identification		
<b>Product Name</b>	Phosphoric Acid 85%	
<b>CAS Number</b>	7664-38-2	
<b>Chemical Formula</b>	H3O4P	
<b>Company Name</b>	CAMACHEM (Part of CAMAL Group) 3F Jinlong East Beijing Station Road Chaoyang District, Beijing, China	
<b>Contact</b>	<a href="mailto:sales@camachem.com">sales@camachem.com</a>	
<b>Company Website</b>	<a href="http://www.camachem.com">www.camachem.com</a>	
Section 2: Composition and Information on Ingredients		
<b>Chemical Name</b>	<b>emsds</b>	<b>EINECS#</b>
Phosphoric acid	>85	231-633-2
Hazard Symbols: C Risk Phrases: 34		
Section 3: Hazards Identification		
<p>Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.</p> <p>Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.</p> <p>Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.</p> <p>Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.</p> <p>Notes to Physician: Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance. Treat symptomatically and supportively.</p>		
Section 4: First Aid Measures		

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**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

**Skin:**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Get medical aid immediately. Wash clothing before reuse.

**Ingestion:**

If swallowed, do NOT induce vomiting. Get medical aid immediately.

If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**

Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance. Treat symptomatically and supportively.

## Section 5: Fire and Explosion Data

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Substance is noncombustible. Contact with metals may evolve flammable hydrogen gas.

**Extinguishing Media:**

Use extinguishing media most appropriate for the surrounding fire.

## Section 6: Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Spill may be carefully neutralized with lime (calcium oxide, CaO).

## Section 7: Handling and Storage

**Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

**Storage:**

Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from metals. Do not store in metal containers. Store protected from moisture. Store away from alkalis.

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

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Exposure Limits CAS# 7664-38-2: United Kingdom, WEL - TWA: 1 mg/m<sup>3</sup> TWA United Kingdom, WEL - STEL: 2 mg/m<sup>3</sup> STEL United States OSHA: 1 mg/m<sup>3</sup> TWA Belgium - TWA: 1 mg/m<sup>3</sup> VLE Belgium - STEL: 2 mg/m<sup>3</sup> VLE France - VME: 1 mg/m<sup>3</sup> VME France - VLE: 3 mg/m<sup>3</sup> VLE Germany: 1 mg/m<sup>3</sup> TWA Japan: 1 mg/m<sup>3</sup> OEL Malaysia: 1 mg/m<sup>3</sup> TWA Netherlands: 0.5 ppm STEL; 2 mg/m<sup>3</sup> STEL Netherlands: 0.2 ppm MAC; 1 mg/m<sup>3</sup> MAC Spain: 1 mg/m<sup>3</sup> VLA-ED Spain: 2 mg/m<sup>3</sup> VLA-EC CAS# 7732-18-5: Personal Protective Equipment Eyes: Wear chemical splash goggles and face shield.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

### Section 9: Physical and Chemical Properties

Physical State: Clear liquid

Color: APHA: 10 max - colorless viscous

Odor: odorless

pH: 1.5 (0.1N aq. soln)

Vapor Pressure: 0.03 mm Hg @ 20 deg C

Viscosity: 3.86 mPa.s

Boiling Point: 158 deg C @ 760 mm Hg

Freezing/Melting Point: 21 deg C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature:

Solubility in water: Miscible.

Specific Gravity/Density: 1.685 g/cm<sup>3</sup>

Molecular Formula: H<sub>3</sub>O<sub>4</sub>P

Molecular Weight: 98.00

### Section 10: Stability and Reactivity Data

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Excess heat, exposure to moist air or water.

Incompatibilities with Other Materials:

Metals, strong oxidizing agents, strong bases, amines, ammonia, sulfuric acid, nitromethane, sodium tetrahydroborate, A 5% solution of H<sub>3</sub>PO<sub>4</sub> is DOT corrosive to both aluminum & carbon steel (results: 272.1 mils/yr & 319.6 mils/yr, respectively). A 4% H<sub>3</sub>PO<sub>4</sub> solution corrodes aluminum at 209.1 mils/yr & carbon steel at 240.9 mils/yr..

Hazardous Decomposition Products:

Oxides of phosphorus.

Hazardous Polymerization: Will not occur.

### Section 11: Toxicological Information

RTECS#:

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CAS# 7664-38-2: TB6300000 CAS# 7732-18-5: ZC0110000 LD50/LC50:  
CAS# 7664-38-2: Draize test, rabbit, eye: 119 mg Severe; Draize test, rabbit, skin: 595 mg/24H Severe;  
Inhalation, mouse: LC50 = 25.5 mg/m<sup>3</sup>; Inhalation, rat: LC50 = >850 mg/m<sup>3</sup>/1H; Inhalation, rat: LC50 = 25.5 mg/m<sup>3</sup>; Oral, mouse: LD50 = 1.25 gm/kg; Oral, rat: LD50 = 1530 mg/kg; Oral, rat: LD50 = 1.25 gm/kg; Skin, rabbit: LD50 = 2740 mg/kg.  
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg.  
Carcinogenicity:  
Phosphoric acid - Not listed by ACGIH, IARC, or NTP.  
Water - Not listed by ACGIH, IARC, or NTP.  
Other:  
See actual entry in RTECS for complete information.

### Section 12: Ecological Information

Ecotoxicity:  
Fish: Mosquito Fish: LC50 = 138 mg/L; 96 Hr; Unspecified Other Dangerous to aquatic life in high concentrations.

### Section 13: Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14: Transport Information

IATA  
Shipping Name: PHOSPHORIC ACID  
Hazard Class: 8  
UN Number: 1805  
Packing Group: III  
IMO  
Shipping Name: PHOSPHORIC ACID, LIQUID or SOLID  
Hazard Class: 8  
UN Number: 1805  
Packing Group: III  
RID/ADR  
Shipping Name: PHOSPHORIC ACID  
Hazard Class: 8  
UN Number: 1805  
Packing group: III  
USA RQ: CAS# 7664-38-2: 5000 lb final RQ; 2270 kg final RQ

### Section 15: Other Regulatory Information

European/International Regulations  
European Labeling in Accordance with EC Directives  
Hazard Symbols: C  
Risk Phrases:  
R 34 Causes burns.  
Safety Phrases:  
S 26 In case of contact with eyes, rinse immediately

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with plenty of water and seek medical advice.  
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
WGK (Water Danger/Protection)  
CAS# 7664-38-2: 1  
CAS# 7732-18-5: No information available.  
Canada  
CAS# 7664-38-2 is listed on Canadas DSL List.  
CAS# 7732-18-5 is listed on Canadas DSL List.  
CAS# 7664-38-2 is listed on Canadas Ingredient Disclosure List.  
CAS# 7732-18-5 is not listed on Canadas Ingredient Disclosure List.  
US FEDERAL  
TSCA  
CAS# 7664-38-2 is listed on the TSCA inventory.  
CAS# 7732-18-5 is listed on the TSCA inventory.

**Section 16: Other Information**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we m be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.*

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