# Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

## Section 1: Identification

**Product Name** Phosphoric Acid NF 85%
**Commercial Name** Not available.
**Product Use** Not available.
**Restrictions On Use** Not available.

**Product Code** 50-1303

**Company**
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
**CHEMTREC (24hr) 1-800-424-9300**

## Section 2: Hazard(s) Identification

**OSHA Haz Com:** Corrosive to Metals - Category 1 Acute toxicity (Oral) Category 4 Skin Corrosion/Irritation Category 1B
**CFR 1910.1200** Serious Eye Damage/Eye Irritation Category 1

**Signal Word** DANGER

**Hazard Statement(s)** May be corrosive to metals. Harmful if swallowed. May be harmful in contact with skin. Causes severe skin burns and eye damage.

**Pictogram(s) or Symbol(s)**

**Precautionary Statement(s):**

**Prevention** Keep only in original packaging. Do not breathe dust/fume/mist/vapors. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Absorb spillage to prevent material damage.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a corrosion-resistant container with a resistant inner liner

**Disposal** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

## Section 3: Composition/Information on Ingredients

**Substance/Mixture** Mixture
**Components** Phosphoric Acid, Water
**% By Weight** Phosphoric Acid:85-88%, Water:12-15%
**CAS#** 7664-38-2 (Mixture).
**Molecular Weight** Not applicable.
**Chemical Formula** Not available.
**Synonym(s)** *Phosphoric Acid 85%* Phosphoric Acid* Orthophosphoric acid*

**Mixtures**

| Name | CAS# | % by Weight | TLV/PEL | LC50/LD50 |
|---|---|---|---|---|
| Phosphoric Acid | 7664-38-2 | 85-88 | TWA: 1 STEL: 3 (mg/m3). | ORAL (LD50): Acute: 1530 mg/kg [Rat]. DERMAL (LD50): Acute: 2740 mg/kg [Rabbit]. DUST (LC50): Acute: >850 mg/m3 1 hours [Rat]. |
| Water | 7732-18-5 | 12-15 | N/A | N/A |

## Section 4: First-Aid Measures

**Inhalation** Move to fresh air. Call a physician or poison control center immediately. Apply artificial respiration if victim is not breathing If breathing is difficult, give oxygen.

**Skin Contact** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

**Eye Contact** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air. Get medical attention immediately

**Ingestion** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Symptoms/Effects**

**Acute** Causes severe skin and eye burns. Causes digestive tract burns.

**Delayed** Causes severe skin and eye burns. Causes digestive tract burns.

**Immediate Medical Attention**

Treat symptomatically. Symptoms may be delayed.

## Section 5: Fire-Fighting Measures

**Suitable Extinguishing Media**

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials

**Unsuitable Extinguishing Media**

Not available.

**Products of Combustion**

Not available.

**Firefighters Special Equipment and Precautions**

Product is highly acidic. Wear protective gear if spilled during fire fighting. Not combustible, but if involved in a fire decomposes to produce toxic gases. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Product is highly acidic. Wear protective gear if spilled during fire fighting.

## Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Methods and material for containment and cleaning up: Neutralize with lime or soda ash. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal. Notification Procedures: Inform authorities if large amounts are involved. Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

## Section 7: Handling and Storage

Precautions for safe handling: Do not get in eyes, on skin, on clothing. Do not taste or swallow. Wash thoroughly after handling. Do not eat, drink or smoke when using the product. Use caution when adding this material to water. Add material slowly when mixing with water. Do not add water to the material; instead, add the material to the water. Conditions for safe storage, including any incompatibilities: Do not store in metal containers. Keep container tightly closed. Store in a well-ventilated place.

## Section 8: Exposure Controls/Personal Protection

| | |
|---|---|
| **Exposure Limits** | Phosphoric acid TWA 1 mg/m3 US. ACGIH Threshold Limit Values (2011) STEL 3 mg/m3 US. ACGIH Threshold Limit Values (2011) REL 1 mg/m3 US. NIOSH: Pocket Guide to Chemical Hazards (2010) STEL 3 mg/m3 US. NIOSH: Pocket Guide to Chemical Hazards (2010) PEL 1 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) TWA 1 mg/m3 US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) STEL 3 mg/m3 US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) TWA 1 mg/m3 US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008) TWA PEL 1 mg/m3 US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010) STEL 3 mg/m3 US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010) ST ESL Health 10 µg/m3 US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (06 2018) AN ESL Health 1 µg/m3 US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (06 2018) STEL 3 mg/m3 US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (01 2019) |
| **Engineering Controls** | Not available. |
| **Personal Protection** | General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield. Skin Protection Hand Protection: Chemical resistant gloves Other: Wear suitable protective clothing and gloves. Respiratory Protection: In case of inadequate ventilation use suitable respirator. Respirator type: Chemical respirator with acid gas cartridge. Hygiene measures: Provide eyewash station and safety shower. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes. Avoid contact with skin. |

## Section 9: Physical and Chemical Properties

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|---|---|
| **Appearance** | Liquid. Clear. Colorless. |
| **Odor** | Odorless. |
| **Odor Threshold** | Not available |

| | | | |
|---|---|---|---|
| **Melting Point** | 21.1 °C | **pH** | 1.5 (3.27 g/l, 20 °C) |
| **Freezing Point** | Not available | **Vapor Pressure** | 0.3 kPa |
| **Boiling Point/Range** | 158 °C | **Vapor Density** | Not available. |
| **Decomposition temperature** | Not available. | **Viscosity** | Not available. |
| **Partition Coefficient: n-octanol/water** | Not available. | **Evaporation Rate** | Not available. |
| **Flash Point** | Not available. | **Autoignition temperature** | Not applicable |
| **Flammability** | This product is not flammable | **Flammability or Explosive Limits:** | |
| | | **Lower** | Not available |
| | | **Upper** | Not available |

| | |
|---|---|
| **Solubility(ies)** | Miscible |
| **Other** | Density: 1.69 - 1.71 g/ml (20 °C) Relative density: 1.69 - 1.71 (20 °C) |

## Section 10: Stability and Reactivity

| | |
|---|---|
| **Reactivity** | No dangerous reaction known under conditions of normal use. |
| **Chemical Stability** | Material is stable under normal conditions. |
| **Hazardous Polymerization** | Hazardous polymerization does not occur. |
| **Conditions to Avoid** | Contact with incompatible materials. |
| **Incompatible Materials** | Strong alkalis. Strong reducing agents. Strong oxidizing agents. |
| **Hazardous Decomposition Products** | oxides of phosphorus |

## Section 11: Toxicological Information

**RTECS** Not available.

**Acute Toxicity**

Oral Product: ATEmix (Rat): 1,750 mg/kg Dermal Product: ATEmix (Rabbit) 3,044.44 mg/kg Inhalation Product: No data available. Specified substance(s): Phosphoric acid LC 50 (Guinea pig, Mouse, Rabbit, Rat, 1 h): 193 - 1,689 mg/m3

**Skin Corrosion/Irritation**

Causes severe skin burns

**Serious Eye Damage/Irritation**

Causes serious eye damage.

**Respiratory or Skin Sensitization**

Not a skin nor a respiratory sensitizer.

**Germ Cell Mutagenicity**

No information

**Carcinogenicity**

Not listed

**Reproductive Toxicity**

No information

**Routes of Entry**

Inhalation. Skin. Eye. Ingestion.

**Symptoms Related to Exposure**

Not available

**Potential Health Effects**
Not available

**Target Organ(s)** Not available.

## Section 12: Ecological Information

**Ecotoxicity**
Not available

**Persistance and Degradability**
Expected to be readily biodegradable.

**Bioaccumulative Potential**
Not available

**Mobility in Soil**
The product is water soluble and may spread in water systems.

**Other Adverse Effects**
The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

## Section 13: Disposal Considerations

**Waste Disposal**
Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Disposal of Container**
Since emptied containers retain product residue, follow label warnings even after container is emptied.

**Other Considerations**
Not available

## Section 14: Transport Information

**DOT Classification**
DOT UN Number: UN 1805 UN Proper Shipping Name: Phosphoric acid solution Transport Hazard Class(es) Class: 8 Label(s): 8 Packing Group: III Marine Pollutant: No Special precautions for user: Keep away from alkalis. IMDG UN Number: UN 1805 UN Proper Shipping Name: PHOSPHORIC ACID SOLUTION Transport Hazard Class(es) Class: 8 Label(s): 8 EmS No.: F-A, S-B Packing Group: III Marine Pollutant: No Special precautions for user: Keep away from alkalis. IATA UN Number: UN 1805 Proper Shipping Name: Phosphoric acid, solution Transport Hazard Class(es): Class: 8 Label(s): 8 Packing Group: III Marine Pollutant: No Special precautions for user: Keep away from alkalis.

## Section 15: Regulatory Information

**Regulations**
US Federal Regulations TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) None present or none present in regulated quantities. US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) None present or none present in regulated quantities. CERCLA Hazardous Substance List (40 CFR 302.4): Chemical Identity Reportable quantity Phosphoric acid 5000 lbs. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Corrosive to metal Acute toxicity (any route of exposure) Skin Corrosion or Irritation Serious eye damage or eye irritation SARA 302 Extremely Hazardous Substance None present or none present in regulated quantities. SARA 304 Emergency Release Notification None present or none present in regulated quantities. SARA 311/312 Hazardous Chemical Chemical Identity Threshold Planning Quantity Phosphoric acid 10000 lbs. SARA 313 (TRI Reporting) None present or none present in regulated quantities. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None present or none present in regulated quantities. Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Chemical Identity Reportable quantity Phosphoric acid Reportable quantity: 5000 lbs. US State Regulations US. California Proposition 65 No ingredient requiring a warning under CA Prop 65. US. New Jersey Worker and Community Right-to-Know Act Chemical Identity Phosphoric acid US. Massachusetts RTK - Substance List Chemical Identity Phosphoric acid US. Pennsylvania RTK - Hazardous Substances Chemical Identity Phosphoric acid US. Rhode Island RTK Chemical Identity Phosphoric acid

**Other**
Not available.

## Section 16: Other Information

Not available.