



# MATERIAL SAFETY DATA SHEET

---

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

---

**Product Name: PHOSPHORIC ACID 85%**

Company: Recochem Inc. ABN: 69 010 485 999  
Address : 1809 Lytton Road, Lytton, Queensland 4178  
Phone: (07) 3308 5200 Fax: (07) 3308 5201  
Emergency Telephone Number: (07) 3308 5200 Day, After Hours 1300 131 001

Other Names: Orthophosphoric Acid, Hydrogen Phosphate  
Manufacturer's Product Code: 21007  
Recommended Use: Manufacture of phosphate fertilizers and salts, detergents, corrosion inhibitors, water treatment

---

## SECTION 2 HAZARDS IDENTIFICATION

---

**CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA  
A DANGEROUS GOODS ACCORDING TO THE CRITERIA OF THE ADG CODE**

**Symbols:** C - Corrosive  
**Risk Phrases:** R34 - Causes burns  
**Safety Phrases:** S1/2 - Keep locked up and out of reach of children  
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S45 - In case of accident or if you feel unwell seek medical advice immediately (show label if possible)

---

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

---

### Hazardous Ingredients

<i>Chemical Entity</i>	<i>CAS Number</i>	<i>Proportion (%)</i>
Phosphoric Acid	7664-38-2	85
Water	7732-18-5	15

---

## SECTION 4 FIRST AID MEASURES

---

### FIRST AID TREATMENT

**Swallowed:** Immediately rinse mouth with copious amounts of water. Seek immediate medical attention.  
**Eye:** If in eyes, hold eyes open, flood with water for at least 15 minutes or until advised by the Poisons Information Centre or a doctor. Seek immediate medical attention.  
**Skin:** If spilt on large area of skin or hair, immediately drench with running water and remove contaminated clothing. Continue to wash skin and hair with plenty of water until advised to stop by the Poisons Information Centre or a doctor. Seek medical attention.  
**Inhaled:** Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing. Seek immediate medical advice.

**First Aid facilities:** Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers.

**Advice to Doctor:** Treat symptomatically.

**Additional Information:** None available.

**Product: PHOSPORIC ACID 85%**

---

## **SECTION 5 FIRE FIGHTING MEASURES**

---

**Specific Hazards:** Non-combustible material. Will decompose in fire conditions, releasing toxic and irritating oxides of phosphorus. Contact with common metals produces hydrogen which may form flammable mixtures with air.

**Suitable Extinguishing Media:** Foam, dry chemical powder, carbon dioxide, water spray or water fog. Do not use water jets.

**Hazards from combustion products:** Decomposes on heating, emitting toxic fumes.

**Precautions for Fire Fighters and Special Protective Equipment:** Wear full protective clothing and self-contained breathing apparatus.

**Additional Information:** Hazchem code 2R.

---

## **SECTION 6 ACCIDENTAL RELEASE MEASURES**

---

Observe all local and national regulations.

**Spills and Disposal:** Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contact and breathing mist. Work upwind or increase ventilation. Cover with absorbent inert material, sand or soil. Sweep or vacuum up, but avoid generating dust/mist. Collect and seal in properly labelled containers or drums for disposal. Caution – heat may be evolved on contact with water. If contamination of sewers or waterways has occurred advise local emergency services.

**Methods and Materials for Containment and Clean Up Procedures:** For small spills (<1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely. For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

---

## **SECTION 7 HANDLING AND STORAGE**

---

**Precautions for Safe Handling and Storage:** Avoid skin and eye contact and breathing dust. Store in a cool, dry and well ventilated place, out of direct sunlight. Before eating, drinking or smoking, remove contaminated clothing and wash hands. Do not eat, drink or smoke in contaminated areas. Store away from incompatible materials (SECTION 10). Keep containers closed when not in use – check regularly for spills. Have emergency equipment (for fires, spills, leaks etc.) readily available. When preparing or diluting acid solutions, the acid should be added slowly to water with plenty of careful stirring to prevent overheating, splashing and splattering of the acid.

**Dispensing:** No information available.

**Flammability:** Non-combustible material.

---

## **SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

**Exposure Standards:** National Occupational Health & Safety Commission (NOHSC) Worksafe Australia has set an exposure standard 3mg/m<sup>3</sup> STEL, 1mg/m<sup>3</sup> TWA

**Biological Limit Values:** No biological limit allocated.

**Personal Protective Equipment:**

**Respiratory Protection:** In instances where concentrations are likely to exceed the exposure limits, an approved organic vapour respirator (AS/NZS 1715 and 1716) should be worn.

**Hand Protection:** Use impervious gloves.

**Eye Protection:** Wear safety goggles, safety glasses with side shields or full face shield as appropriate. Eye protection should conform with AS/NZS 1337 –Eye Protectors for Industrial Applications.

**Protective Clothing:** Use chemical resistant glove/gauntlets, boots and overalls.

**Engineering Controls:** Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Always wash hands before eating, drinking or using the toilet.

---

## **SECTION 9 IDENTIFICATION**

---

### **PHYSICAL DESCRIPTION / CHEMICAL PROPERTIES**

Appearance	Clear, colourless syrupy liquid; odourless
Odour	None
pH (1% solution in water)	1.5
Vapour Pressure (mmHg @ 20°C):	Not applicable
Vapour Density (air = 1)	Not applicable
Boiling Point (°C):	158

**Product: PHOSPORIC ACID 85%**

Freezing/Melting Point (°C):	21
Solubility in Water	Miscible with water
Specific Gravity (g/ml @ 20°C):	1.685
Flashpoint (°C):	Not applicable
Flammability Limits (%):	Not applicable
Auto Ignition Temperature (°C):	Not applicable
Percent Volatiles	0

---

**SECTION 10 STABILITY AND REACTIVITY**

---

**Chemical Stability:** Stable under normal storage conditions.

**Conditions to Avoid:** Will absorb moisture from the atmosphere. Reacts exothermally with water.

**Incompatible Materials:** Incompatible and will react with strong bases, strong oxidising and reducing agents, sulphides, phosphides, cyanides, acetylides, fluorides and carbides releasing flammable or toxic gases.

**Hazardous Decomposition Products:** Hazardous decomposition products formed under fire conditions – nature of decomposition products not known.

---

**SECTION 11 TOXICOLOGICAL INFORMATION**

---

*Acute:*

**Swallowed:** LD50 (oral rate), 1530mg/kg. Ingestion of this product may cause burns to the mouth and throat, pain in the stomach, difficulty in breathing, nausea, vomiting diarrhoea, and convulsions. It may cause gastric or oesophageal perforation.

**Eye:** Corrosive to eyes. Mists may cause severe eye irritation. When splashed in the eyes, concentrated solutions can cause severe burns, pain and permanent eye damage.

**Skin:** LD50 (dermal, rabbit), 2740 mg/kg. Corrosive to skin. Skin contact will cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.

**Inhaled:** Inhalation of mists or vapours will result in respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary oedema, pneumonitis and emphysema.

**Chronic:** Prolonged exposures can cause necrosis of nasal passages and oedema of the lungs.

---

**SECTION 12 ECOLOGICAL INFORMATION**

---

**Ecotoxicity:** Avoid contaminating waterways. May be harmful to aquatic organisms due to the shift of the pH.

**Mobility:** Miscible with water.

**Persistence/degradability:** No data available.

**Bioaccumulation:** No data available.

---

**SECTION 13 DISPOSAL CONSIDERATIONS**

---

**Disposal Methods:** Ensure waste disposal conforms to local waste disposal regulations.

---

**SECTION 14 TRANSPORT INFORMATION**

---

UN Number:	1805	Proper Shipping Name:	PHOSPHORIC ACID
Class:	8	Subsidiary Risk:	None
Packing Group:	III	Hazchem Code:	2R
Special Precautions for User:	None		

---

**SECTION 15 REGULATORY INFORMATION**

---

Poisons Schedule : 6

AICS : Listed

Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76:2010) : 37

---

**SECTION 16 OTHER INFORMATION**

---

Further Information may be obtained by contacting Recochem on (07) 3308 5200

**Product: PHOSPHORIC ACID 85%**

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product.

---