

Safety Data Sheet (SDS)

Phosphoric acid

CAS 7664-38-2 | GHS Rev 1.0 | June 2026

SECTION 1: IDENTIFICATION

Product Name: Phosphoric acid

CAS Number: 7664-38-2

Molecular Formula: H₃O₄P

Recommended Use: Industrial chemical / research reagent / intermediary

Supplier: SUNCHEM CO.,LTD. | info@sunchemgroup.com | www.sunchemgroup.com

Emergency: Contact local emergency services or poison control center

SECTION 2: HAZARD IDENTIFICATION

Signal Word: **WARNING**
Hazard Statements:

Refer to supplier SDS for hazard information

Precautionary Statements:

P260 – Do not breathe dust/fume/gas/mist/vapours/spray.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 – IF SWALLOWED: Call a POISON CENTER if you feel unwell.

P501 – Dispose of contents/container in accordance with local regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Content
Phosphoric acid	7664-38-2	≥ 98% (typical; see COA)
Residual impurities	Various	Balance

SECTION 4: FIRST AID MEASURES

Inhalation: Move to fresh air. Seek medical attention if symptoms persist.

Skin Contact: Wash thoroughly with soap and water for ≥ 15 minutes. Remove contaminated clothing.

Eye Contact: Flush with water for ≥ 15 minutes, lifting eyelids. Seek immediate medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Call poison control. Seek medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media: CO₂, dry powder, foam, water spray

Special Hazards: May emit toxic fumes on decomposition

Fire Fighters PPE: Self-contained breathing apparatus; full protective suit

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate PPE (see Section 8). Avoid breathing vapours

Environmental: Prevent entry into drains and waterways

Clean-up: Absorb with inert material. Collect in sealed containers for disposal

SECTION 7: HANDLING AND STORAGE

Handling: Use in well-ventilated area. Avoid contact with skin and eyes. Do not eat/drink/smoke during use

Storage: Store in original sealed container. Cool, dry, well-ventilated. Keep away from incompatibles

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation recommended

Respiratory: Half-mask or full-face respirator with appropriate filter

Eyes/Face: Safety goggles or face shield

Hands: Chemical-resistant gloves (nitrile ≥ 0.4 mm recommended)

Body: Lab coat or coveralls; chemical-resistant footwear

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight	97.995 g/mol
Molecular Formula	H3O4P
IUPAC Name	phosphoric acid
Log P (XLogP)	-2.1
TPSA	77.8 Å ²
Physical State / Appearance	Contact supplier for detailed physical property data
Melting/Boiling Point	Contact supplier — product-specific

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions

Avoid: Extreme heat, oxidising agents, open flame

Hazardous Decomposition: Product-specific; refer to full SDS from supplier

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Data not available for this batch-generated document. Request full SDS from SUNCHEM CO.,LTD.

Routes of Exposure: Inhalation, skin contact, eye contact, ingestion

Note: This document is a template. Verify toxicological data with product-specific SDS before use.

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: Data not available. Handle with care to prevent environmental release

Persistence: Contact supplier for biodegradation data

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Method: Dispose per local, national, and international regulations. Do not discharge to drains without treatment

SECTION 14: TRANSPORT INFORMATION

UN Number: Contact supplier for UN number and hazard class

Note: Classification depends on product concentration and formulation

SECTION 15: REGULATORY INFORMATION

Compliance: GHS (Rev 8); EU CLP (EC 1272/2008); GB/T 17519 (China SDS standard)

SECTION 16: OTHER INFORMATION

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Prepared by: SUNCHEM CO.,LTD. — Regulatory Affairs

■ **DISCLAIMER:** *This SDS is a template generated for reference purposes. It is NOT a substitute for a product-specific, laboratory-verified Safety Data Sheet. Users must obtain a verified SDS before handling this chemical. SUNCHEM CO.,LTD. accepts no liability for use of this template document in safety-critical applications.*