

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material Name: Phosphotungstic acid.
Catalogue Number: C072
Other Names: Tungstophosphoric acid.
Recommended Use: Negative stain for electron microscopy.

Supplier Name: ProSciTech
Street Address: 1/11 Carlton Street, Kirwan, Qld. 4817 Australia
Telephone Number: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)
Emergency Contact: (07) 4773 9444 - 8:30am – 5:00pm, Monday to Friday (excluding Public Holidays)

SECTION 2 - HAZARDS IDENTIFICATION

Hazard Classification:

Hazardous according to the criteria for Classifying Hazardous Substances [NOHSC:1008].

Hazardous and/or Dangerous Nature:

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Risk Phrases:

R34 Causes burns.

Safety Phrases:

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Refer to Section 15 for Poisons Schedule.

SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS

Pure Substance (Proportion 100%):

Chemical Identity: Phosphotungstic acid.
Common Name(s): Tungstophosphoric acid.
CAS Number: 12501-23-4

SECTION 4 - FIRST AID MEASURES

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Eye Contact: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin Contact: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

First Aid Facilities: Eyebath/eyewash, Safety shower & general washroom facilities.

Medical Attention & Special Treatment:

Treat symptomatically and supportively.

Additional Information:

Corrosive. Causes severe eye and skin burns. Causes severe digestive and respiratory tract burns.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Hazards from Combustion Products:

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Precautions for Fire Fighters:

As in any fire, wear a self-contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Hazchem Code: 2X

SECTION 6 - ACCIDENTAL RELEASE MEASURES**Emergency Procedures:**

Use proper personal protective equipment as indicated in Section 8.

Containment & Clean up:

Clean up spills immediately, sweep up, and then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

SECTION 7 - HANDLING & STORAGE**Precautions for Safe Handling:**

Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Discard contaminated shoes.

Precautions for Safe Storage:

Keep away from heat and flame. Keep refrigerated. (Store below 4°C/39°F.) Keep container closed when not in use. Corrosives area. Store in a cool, dry area away from incompatible substances.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards: Phosphotungstic acid CAS12501-23-4: Listed under Tungsten, insoluble compounds (as W) CAS7440-33-7:
TWA 1mg/m³
STEL 3mg/m³

Biological Limit Values: No biological limit allocated.

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment:

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

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 if workplace conditions warrant respirator use.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance:	White to cream crystal powder.
Odour:	Not available.
pH:	Not available.
Vapour pressure (mm of Hg at °C):	Not available.
Vapour density:	Not available.
Boiling point/range (°C):	Not available.
Freezing/melting point (°C):	0°C.
Solubility:	Soluble.
Specific gravity or density:	Not available.
Flash Point:	Not available.
Flammable (explosive) limits:	Not available.
Ignition temperature:	Not available.
Additional Information:	Not available.

SECTION 10 - STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions of use.

Conditions to avoid: High temperatures, dust generation.

Incompatible Materials: Strong bases.

Hazardous Decomposition Products:

Produces Phosphine, oxides of phosphorus in fire conditions.

Hazardous Reactions: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION**Exposure and Health Effects:**

Corrosive. Causes severe eye and skin burns. Causes severe digestive and respiratory tract burns. Chronic effects may be delayed.

Ingestion:

May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhoea, and shock. May cause systemic effects.

Inhalation:

Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary oedema. May cause systemic effects.

Eye Contact:

Causes eye burns. Contact may cause ulceration of the conjunctiva and cornea.

Skin Contact:

Causes skin burns. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale colour.

Human/Animal data: Not available.

Carcinogenic Category: Not classified as a Carcinogen by the IARC.

Other Carcinogenic Information: Not available.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence and degradability: Not available.

Mobility: Not available.

Additional Information: Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS**Disposal Methods:**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Special Precautions/Additional Informational:

Not available.

SECTION 14 - TRANSPORT INFORMATION

UN Number: UN3260

UN Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Phosphotungstic acid)

Class and Subsidiary risk: 8

Packing Group: PG III

Special Precautions for User: Not available.

Hazchem Code: 2X

SECTION 15 - REGULATORY INFORMATION

Poison Schedule Number: None Allocated.

SECTION 16 - OTHER INFORMATION

Date of preparation of MSDS: April 11

Comments:**List of Publications referenced when creating this MSDS;**

- Hazardous Substances Information System Consolidated Lists: Safe Work Australia.
- APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)] 3rd Edition: National Occupational Health and Safety Commission.
- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

This Material Safety Data Sheet (MSDS) has been prepared in compliance with the National code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this MSDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.

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