

# Material Safety Data Sheet (19500)

## Section 1: Chemical Product and Company Identification

**Product Name:** Phosphotungstic Acid

**Catalog Number:** 19500

**CAS#:** See Section 2 below.

**Contact Information:**

**Electron Microscopy Sciences**

1560 Industry Road

Hatfield, PA 19440

1-215-412-8400 (phone)

1-800-523-5874 (toll-free)

1-215-412-8450 (fax)

**Order Online: [emsdiasum.com](http://emsdiasum.com)**

**CHEMTREC (24-Hour Emergency Telephone), call: 1-800-424-9300**

## Section 2: Composition and Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) CAS #	%	OSHA PEL mg/m3	ACGIH TWA mg/m3	NTP	IARC	OSHA Regulated
Phosphotungstic acid, hydrate (12501-23-4) – hydrate (12067-99-1) – anhydrous	100	ND	1*	No	No	No

\*Listed as Tungsten soluble compounds

## Section 3: Hazards Identification

### Emergency Overview

**Appearance:** White or slightly yellow-green, slightly efflorescent crystals or crystal powder.

**Immediate effects:**

**Potential health effects:**

**Primary Routes of entry:** Ingestion, inhalation

**Signs and Symptoms of Overexposure:** **Eyes:** Moderate irritation; Corrosivity; reversible

**Skin:** Moderate Irritation, Harmful if absorbed through the skin.

**Ingestion:** Harmful if swallowed. Ingestion may cause burns to the gastrointestinal system.

**Inhalation:** Harmful if inhaled. Inhalation may be fatal as a result of spasm, inflammation and edema of larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing and wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

**Lung Effects:** Material is extremely destructive to mucous membranes and upper respiratory tract.

**Chronic Exposure:** ND

**Chemical Listed as Carcinogen or Potential Carcinogen:** None

See Toxicological Information (Section 11)

**Potential environmental effects:** See ecological information (Section 12)

#### Section 4: First Aid Measures

**If accidental overexposure is suspected: Eye(s) Contact:** Flush with water for at least 15 minutes.

**Skin Contact:** Flush with soap and water.

**Inhalation:** Remove to fresh air. Get medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, only qualified personnel should administer oxygen.

**Ingestion:** Get medical attention. Rinse mouth out with water. Give a large amount of milk of magnesia. Never give anything by mouth to an unconscious individual.

**Note to Physician:** Treatment: ND

**Medical Conditions Generally aggravated by exposure:** ND

#### Section 5: Fire and Explosion Data

**Flash Point:** Non-flammable

**Flammable Limits:** NA

**Auto-ignition point:** NA

**Fire Extinguishing Media:** Use extinguishing media most suitable to surrounding fire conditions.

**Special Fire Fighting Procedures:** Wear SCBA

**Unusual Fire and Explosion Hazards:** NA

**Hazardous combustion products:** Oxides of phosphorus and tungsten.

**DOT Class:** Corrosive

#### Section 6: Accidental Release Measures

**Steps to be taken in case material is released or spilled:** Avoid dusting, sweep or scoop up and place in suitable container for proper disposal. Always wear personal protective equipment.

**Waste disposal methods:** Dispose of waste according to federal, state, and local regulations.

#### Section 7 : Handling and Storage

**Precautions to be taken in handling and storage:** Wash thoroughly after handling. Keep tightly closed.

**Storage temperature:** Store in a cool, dry place. **Storage pressure:** NA

#### Section 8: Exposure Controls/Personal Protection

**Engineering Controls: Ventilation required:** Always maintain exposure below permissible exposure limits. Use only in chemical hood.

##### **Personal Protection Equipment**

**Respiratory protection:** Use only NIOSH/MESA approved equipment.

**Protective gloves:** Neoprene, natural rubber, impervious gloves.

**Skin protection:** Protective clothing and gloves.

**Eye protection:** Goggles or face shield.

**Additional clothing and/or equipment:** Emergency eyewash and safety shower.

**Exposure Guidelines:** See composition/information on ingredients (Section 2)

### Section 9: Physical and Chemical Properties

**Appearance and physical state:** White or slightly yellow-green, slightly efflorescent crystals or crystal powder.  
**Odor (threshold):** None  
**Vapor Pressure (mm Hg):** ND  
**Percent Volatile by volume:** ND  
**Boiling Point:** ND  
**pH:** ND  
**Molecular weight:** 2880.20 (anhydrous)

**Specific Gravity (H<sub>2</sub>O=1):** ND  
**Vapor Density (air=1):** ND  
**Evaporation Rate (butyl acetate =1):** ND  
**Freezing point/melting point:** 89°C  
**Solubility in water:** 200 g/100 ml

### Section 10: Stability and Reactivity Data

**Stability:** Stable  
**Conditions to Avoid:** Heat. Contact with incompatibles.  
**Materials to Avoid (Incompatibility):** Strong bases, strong oxidizers, reducing agents.  
**Hazardous Decomposition Products:** Oxides of phosphorus and tungsten.  
**Hazardous Polymerization:** Will not occur.

### Section 11: Toxicological Information

**Results of component toxicity test performed:** Oral, Rat LD50: 3300 mg/kg  
**Human experience:** ND  
This product **does or does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

### Section 12: Ecological Information

**Ecological Information:** ND  
**Chemical Fate Information:** ND

### Section 13: Disposal Considerations

**RCRA 40 CFR 261 Classification:** ND  
Federal, State, and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

### Section 14: Transport Information

**USDOT Information: Proper shipping name:** Corrosive, solid, acidic, inorganic, n.o.s. (Phosphotungstic acid, hydrate)  
Hazard Class: 8      Packaging Group: II      UN Number: UN3260  
**IATA:** Proper shipping name: Corrosive, solid, acidic, inorganic, n.o.s. (Phosphotungstic acid, hydrate)  
Hazard Class: 8      Packing Group: II      UN Number: UN3260  
**IMO:** Proper shipping name: Corrosive, solid, acidic, inorganic, n.o.s. (Phosphotungstic acid, hydrate)  
Class: 8      UN Number: UN3260  
Marine Pollutant: No  
Canadian TDG: Proper shipping name: Corrosive, solid, acidic, inorganic, n.o.s. (Phosphotungstic acid, hydrate)

### Section 15: Other Regulatory Information

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: None

SARA Title III: Section 302: None. Section 313: None

RCRA: ND

TSCA: CAS# 12501-23-4 is not on the TSCA Inventory because it is a hydrate. It is considered list if the CAS number for the anhydrous form (12067-99-1) is on the inventory (40CFR720.3(u)(2)). Section 12B; None are listed.

CERCLA: None

**State Regulations:** California Proposition 65: None

**International Regulations:** Canada WHMIS: Classification e. None listed on the DSL or NDSL

Europe EINECS Numbers:

### Section 16: Other Information:

Label Information: Corrosive

European Risk and Safety Phrases: Causes burns. In case of contact with eyes, rinse immediately with plenty of water and seek medical help. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

European symbols needed: Corrosive

Canadian WHMIS Symbols: Corrosive

HMIS® Hazard Rating (Estimated): Health: **3**; Flammability: **0**; Physical: **0**

NFPA Hazard Rating (Estimated): Health: **3**; Flammability: **0**; Instability: **0**

(0=least, 1=slight, 2=Moderate, 3=High, =Extreme)

**Abbreviations used in this document**

NE = Not established

NA = Not applicable

NIF = No Information Found

ND = No data

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