



Material Safety Data Sheet

Section 1: Product and Company Identification			
Product Name	Phosphotungstic acid hydrate		
Catalogue Number:	ASC-1027		
E-mail:	Sales@ausamics.com	Website:	Ausamics.com

Section 2: Hazards Identification						
Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008						
Acute toxicity, Oral (Category 4), H302 Skin corrosion (Sub-category 1C), H314 Serious eye damage (Category 1), H318 Long-term (chronic) aquatic hazard (Category 2), H411						
Label elements Labelling according to Regulation (EC) No 1272/2008						
Pictogram						
Signal Word	Danger					
Hazard statement(s) H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.						
Precautionary statement(s) P260 Do not breathe dusts or mists. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Supplemental Hazard Statements none						
Other hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.						

Section 3: Composition / Information on Ingredients			
Mixture			
Synonym	Tungstophosphoric acid		
Formula	H ₃ O ₄₀ PW ₁₂ · xH ₂ O		
Molecular weight	2.880,05 g/mol		
CAS-No.	12501-23-4		



Component	Classification	Concentration	
Tungsten hydroxide oxide phosphate (W12(OH)3O33(PO4)), hydrate			
CAS-No.	12501-23-4	Acute Tox. 4; Skin Corr. 1C; Eye Dam. 1; Aquatic Chronic 2; H302, H314, H318, H411	<= 100 %

Section 4: First Aid Measures	
Description of first-aid measures	
General advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call-in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralize.
Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.	
Indication of any immediate medical attention and special treatment needed No data available	

Section 5: Fire Fighting Measures	
Extinguishing media	
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Not combustible. Ambient fire may liberate hazardous vapors.
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures	
Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dust.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage**Precautions for safe handling**

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Storage conditions Tightly closed. Dry.

Storage class Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials.

Section 8: Exposure Controls / Personal Protection**Control parameters****Components with workplace control parameters****Exposure controls****Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles.

Skin protection

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Body Protection**Acid-resistant protective clothing****Respiratory protection**

required when dust is generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur must ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures must be properly documented.

Control of environmental exposure

Do not let product enter drains.



Section 9: Physical and Chemical Properties	
Physical state	Crystalline
Color	White
Odor	No data available
Melting point/freezing point	Melting point/range: 95 °C - lit.
Initial boiling point and boiling range	107,9 °C at ca.1.013,25 hPa - (ECHA)
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	Not applicable
Vapor pressure	25,62 hPa at 25 °C - OECD Test Guideline 104
Autoignition temperature	Not applicable
Decomposition temperature	Not applicable
pH	2 at 20 °C
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	Not applicable for inorganic substances
Density	No data available
Relative density	3,88 at 20 °C - OECD Test Guideline 109
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	none
Other safety information	No data available

Section 10: Stability and Reactivity	
Reactivity	No data available
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature).
Possibility of hazardous reactions	Exothermic reaction with: Strong bases
Conditions to avoid	no information available
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5.



Section 11: Toxicological Information	
Information on toxicological effects	
Mixture	
Acute toxicity	LD50 Oral - Rat - female - 300 - 2.000 mg/kg (OECD Test Guideline 423) Symptoms: Ingestion causes burns of the upper digestive and respiratory tracts. Symptoms: Cough, Shortness of breath, mucosal irritations, Possible damages:, damage of respiratory tract Dermal: No data available
Skin corrosion/irritation	Skin - In vitro study Result: Corrosive after 1 to 4 hours of exposure - 4 h (OECD Test Guideline 435)
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	In animal experiments: Result: negative (OECD Test Guideline 429)
Germ cell mutagenicity	Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	
Endocrine disrupting properties Product: Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Cough, Shortness of breath, Headache, Nausea, Vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties cannot be excluded. Handle in accordance with good industrial hygiene and safety practice.	

Section 12: Ecological Information	
Toxicity	
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 70,8 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 7,8 mg/l - 72 h (OECD Test Guideline 201)



Toxicity to bacteria	static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209)
Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties Product: Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	Harmful effect due to pH shift. Discharge into the environment must be avoided.

Section 13: Disposal Consideration

Waste treatment methods

Product

Offer surplus and non- recyclable solutions to a licensed company. Contact a licensed professional waste disposal service to dispose of this material

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

UN number	ADR/RID: 3260 IMDG: 3260 IATA: 3260
UN proper shipping name	ADR/RID: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tungsten hydroxide oxide phosphate (W12(OH)3O33(PO4)), hydrate) IMDG: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tungsten hydroxide oxide phosphate (W12(OH)3O33(PO4)), hydrate) IATA: Corrosive solid, acidic, inorganic, n.o.s. (Tungsten hydroxide oxide phosphate (W12(OH)3O33(PO4)), hydrate)
Transport hazard class(es)	ADR/RID: 8 IMDG: 8 IATA: 8
Packaging group	ADR/RID: III IMDG: III IATA: III
Environmental hazards	ADR/RID: yes IMDG Marine pollutant: yes IATA: no
Special precautions for user	Tunnel restriction code: (E)
Further information	No data available

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

ENVIRONMENTAL HAZARDS

**Other regulations**

Observe work restrictions regarding maternity protection in accordance with Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Section 16: Additional Notes

Documented By	Ausamics Life Science Sales@Ausamics.com
Revision date	June 11, 2024
Summary of Revisions	This document has been revised to meet the requirements of the US OSHA HazCom 2012 Standard, which supersedes the existing regulations outlined in 29 CFR 1910.1200, in order to align with the internationally recognized globally Harmonized System of Classification and Labeling of chemicals (GHS).
Disclaimer	The information presented in this Safety Data sheet is accurate to the best of our knowledge, information, and belief at the time of publication. It is intended as a guide for the safe handling, use, processing, storage, transportation, disposal, and release of specific materials. However, it should be interpreted as a warranty or quality specification. The provided information pertains solely to the designated material and may not be applicable to its use in combination with other materials or in any process, unless explicitly stated in the text.