



Safety Data Sheet

According to 29 CFR 1910.1200 (OSHA HCS)

SDS No. 1045

Review date June 4, 2020

1 Identification of substance and company

Product details

Product name: **Lead Tungstate**
Product code: 11502, 13084
Relevant identified uses of the substance: Research and product development
Manufacturer/Supplier: Noah Technologies Corporation
1 Noah Park
San Antonio, Texas 78249-3419
Phone: (210) 691-2000
Web site: www.noahtech.com
Emergency information: CHEMTREC
800-424-9300

2 Hazards identification

Hazard designation:

GHS label elements



Signal word:

Danger

Hazard statements:

H302+H332 Harmful if swallowed or if inhaled
H350 May cause cancer
H360 May damage fertility or the unborn child
H373 May cause damage to organs through prolonged or repeated exposure.
H400+H410 Acute and chronic aquatic toxicity

Precautionary statements:

P201+P202 Obtain special instruction before use. Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release into the environment.
P280 Wear protective gloves/protective clothing/ eye protection/ face protection.
P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage
P405 Store locked up
P501 Dispose of contents/ container to an approved waste disposal plant.

GHS Classification:

Acute toxicity, oral - 4
Acute toxicity, Inhalation - 4
Carcinogenicity - 1B
Reproductive toxicity - 1A
Specific target organ toxicity - repeated exposure - 2
Acute aquatic toxicity - 1
Chronic aquatic toxicity - 1

Classification of the substance or mixture:

Hazards not otherwise classified:

None

HMIS ratings (scale 0-4):

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

3 Composition/Information on ingredients

Chemical name: Lead Tungstate
Designation: (CAS#): *7759-01-5
EC Number: 231-849-7
Formula: PbWO₄
Synonyms: Lead tungsten oxide

4 First aid measures

After inhalation: Seek immediate medical advice
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

After skin contact: Instantly wash with water and soap and rinse thoroughly. Remove contaminated clothing.
If irritation persists, consult a physician

After eye contact: Rinse opened eye for at least 15 minutes under running water. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

After swallowing: If conscious, give 1-2 glasses of milk, induce vomiting, and seek medical attention immediately.

Most important symptoms and effects, both acute and delayed: None identified

Indication of any immediate medical attention and special treatment needed: None identified

5 Fire-fighting measures

Suitable extinguishing agents: Non-flammable; Use extinguishing media most appropriate to surrounding fire conditions

Special hazards caused by the material, its products of combustion or resulting gases: In case of fire, the following can be released:
Oxides of lead and tungsten

Protective equipment: Wear self-contained breathing apparatus
Wear fully protective fire fighting equipment/clothing in fire situations

6 Accidental release measures

Person-related safety precautions: Wear personal protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

Measures for environmental protection: Do not allow material to be released to the environment without proper governmental permits

Measures for cleaning/collecting: Dispose of contaminated material as waste according to section 13
Place in a suitable container for proper disposal
Ventilate and wash spill site after material removal is complete

Additional information: See Section 7 for information on safe handling
See Section 8 for information on personal protective equipment
See Section 13 for information on disposal

7 Handling and storage

Information for safe handling: Keep containers tightly sealed
Store in cool, dry place in tightly closed containers
Ensure good ventilation/exhaustion at the workplace

Information about protection against explosions and fires: This product is not flammable

Storage requirements to be met by storerooms and containers: No special requirements

Information about storage in one common storage facility: Do not store together with strong acids

Further information about storage condition: Keep container tightly sealed
Store in cool, dry conditions in well sealed containers

8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute

Components with critical values that require monitoring at the workplace: ACGIH TLV: TWA 0.05 mg(Pb)/m³; 0.05 mg(W)/m³

Additional information: None

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures should be adhered to in handling the chemicals
Keep away from foodstuffs, beverages and food
Instantly remove any soiled and impregnated garments
Wash hands during breaks and at the end of the work

Respiratory protection: Use suitable respirator when high concentrations are present
Use only NIOSH/MESA or CEN approved dust mask type N95 or TYPE P1 (EN 143)

Hand protection: Impervious gloves

Eye protection: Safety glasses

Skin protection: Protective work clothing

Additional protective equipment: Sufficient to prevent contact
Emergency eyewash and safety shower

9 Physical and chemical properties

General Information:

Physical state: Powder
Color: White
Smell: None
Molecular Weight (Calculated): 455.04
pH (5% solution) Not determined
Melting point/range: Not determined
Boiling point/range: Not determined
Flash point: Non-flammable
Autoignition temperature: Not determined
Decomposition temperature: Not determined
Danger of explosion: Product does not present an explosion hazard
Flammable limits:
Lower: Not determined
Upper: Not determined
Vapor pressure (mm Hg): Not determined
Specific gravity at 20 °C Not determined
Solubility in/Miscibility with water at 20 °C Insoluble

10 Stability and reactivity

Conditions to be avoided: No decomposition if used and stored according to specifications
See section 7 for information on proper handling and storage
Materials to be avoided: Strong oxidizing agents
See section 7 for additional incompatibilities
Dangerous reactions: No dangerous reactions known
Hazardous decomposition products: Oxides of lead and tungsten

11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification: None

Primary irritant effect:

on the skin: May cause irritation
on the eye: May cause irritation
Sensitization: No sensitizing effect known

Carcinogenicity:

IARC: Group 2A: Probably carcinogenic to humans.
NTP: Reasonably anticipated to be a human carcinogen, Reference note has been added by TD based on the background information of the NTP
OSHA: Known human reproductive toxicant. May cause damage to organs through prolonged and repeated exposure.

Additional toxicological information:

Lead salts have been reported to cross the placenta and to induce embryo- and feto-mortality. They also have teratogenic effect in some animals species. No teratogenic effects have been reported with exposure to organometallic lead compounds. Adverse effects of lead on human reproduction, embryonic and fetal development, and postnatal (e.g., mental) development have been reported. Excessive exposure can affect blood, nervous, and digestive systems. The synthesis of hemoglobin is inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Additional symptoms of overexposure include: joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), headache, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death.

12 Ecological information

General notes:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Very toxic to aquatic life with long lasting effects.
Do not allow material to be released to the environment without proper governmental permits

13 Disposal considerations

Product recommendation: Consult state, local or national regulation for proper disposal
Unclean packaging recommendation: Disposal must be made according to official regulations
Recommended cleaning agent: Water, if necessary with cleaning agent

14 Transport information

Land transport DOT

Proper shipping name: Lead compounds, soluble, n.o.s.
Technical name: Lead Tungstate
DOT Hazard Class: 6.1
UN Identification number: UN2291
Packing group: PG III
North American Emergency Response Guidebook No.: 151
Notes:

Air transport ICAO-TI and IATA-DGR:

Proper shipping name: Lead compounds, soluble, n.o.s.
Technical name: Lead Tungstate
DOT Hazard Class: 6.1
UN Identification number: UN2291
Packing group: PG III
North American Emergency Response Guidebook No.: 151

UPS Ground / FedEx Ground

Proper shipping name: Lead compounds, soluble, n.o.s.
Technical name: Lead Tungstate
DOT Hazard Class: 6.1
UN Identification number: UN2291
Packing group: PG III
North American Emergency Response Guidebook No.: 151

UPS Air

Proper shipping name: Lead compounds, soluble, n.o.s.
Technical name: Lead Tungstate
DOT Hazard Class: 6.1
UN Identification number: UN2291
Packing group: PG III
North American Emergency Response Guidebook No.: 151

15 Regulatory information

National regulations: All components of this product are listed on the Canadian Domestic Substances List (DSL)
Control Act Chemical Substance Inventory
All components of this product are listed on the Canadian Domestic Substances List (DSL)

Information about limitation of use: For use only by technically qualified individuals

16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.