

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Terbium Oxalate Decahydrate

Product Code: TB-OXL-05-C.10HYD

CAS Number: 24670-06-2

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
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Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Signal Word

Warning

Hazard Statements

Harmful if swallowed or in contact with skin



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Skin

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component: Terbium(III) oxalate decahydrate

CAS-No: 51373-66-1

Weight %: ≤100

SECTION 4. FIRST AID MEASURES

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Get medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO₂). Powder. Water spray. In case of major fire and large quantities:

Evacuate area. Fight fire remotely due to the risk of explosion.

Unsuitable Extinguishing Media No information available

Flash Point No information available

Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Terbium oxide.

Protective Equipment and Precautions for Firefighters

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

NFPA
Health - 2
Flammability - 1
Instability - 0
Physical hazards -

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.
Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological Information. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.
Methods for Containment and Clean Up
Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limit established by the region specific regulatory bodies.
Health - 2
Flammability - 1
Instability - 0
Physical hazards -
Engineering Measures Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment
Eye/face Protection 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 and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid Crystalline
Appearance No information available
Odor No information available
Odor Threshold No information available
pH No information available
Melting Point/Range No data available
Boiling Point/Range No information available
Flash Point No information available
Evaporation Rate Not applicable
Flammability (solid,gas) No information available
Flammability or explosive limits
Upper No data available
Lower No data available
Vapor Pressure No information available
Vapor Density Not applicable
Specific Gravity No information available
Solubility No information available
Partition coefficient; n-octanol/water No data available
Autoignition Temperature No information available
Decomposition Temperature No information available
Viscosity Not applicable
Molecular Formula $C_6O_{12}Tb_2.10H_2O$
Molecular Weight 762.06 (581.91anhy)

SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available
Stability Stable under normal conditions.
Conditions to Avoid Incompatible products.
Incompatible Materials Oxidizing agent
Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO₂), Terbium oxide
Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions None under normal processing.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Product Information
Component Information
Toxicologically Synergistic
Products
No information available
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Irritation No information available
Sensitization No information available
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.
Mutagenic Effects No information available
Reproductive Effects No information available.
Developmental Effects No information available.

Teratogenicity No information available.
STOT - single exposure None known
STOT - repeated exposure None known
Aspiration hazard No information available
Symptoms / effects, both acute and delayed
No information available
Endocrine Disruptor Information No information available
Other Adverse Effects The toxicological properties have not been fully investigated

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.
Persistence and Degradability Insoluble in water May persist
Bioaccumulation/ Accumulation No information available.
Mobility Is not likely mobile in the environment due its low water solubility.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14. TRANSPORT INFORMATION

DOT
UN-No UN3288
Proper Shipping Name Toxic solid, inorganic, n.o.s.
Technical Name (Terbium(III) oxalate decahydrate)
Hazard Class 6.1
Packing Group III
TDG
UN-No UN3288
Proper Shipping Name Toxic solid, inorganic, n.o.s.
Hazard Class 6.1
Packing Group III
IATA
UN-No UN3288
Proper Shipping Name Toxic solid, inorganic, n.o.s.
Hazard Class 6.1
Packing Group III
IMDG/IMO
UN-No UN3288
Proper Shipping Name Toxic solid, inorganic, n.o.s.
Hazard Class 6.1
Packing Group III

SECTION 15. REGULATORY INFORMATION

TSCA 12(b) - Notices of Export Not applicable

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.