

Material Safety Data Sheet

Product Name: Terbium Hydride(III)

Date of revision:-

Prepared in accordance with GB/T 16483
And GB/T 17519

Date originally compiled: 21 July 2022

SECTION 1: Identification

GHS Product identifier: Terbium Hydride(III)

Other means of identification: Terbium Trihydride; CAS 13598-54-4; EINECS 237-071-4;

Company: JiangXi ViiLaa metal material Co., Ltd.

Address: Longhua Industrial Park, Nankang District, Ganzhou, Jiangxi

Post code: 341000

Fax: 86-0797-6799918

Telephone: 0797-679918

Email address: jxzxmetal@gmail.com

Emergency phone number: 18870739810

Service hours: Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours)

Recommendations and Restricted uses: Industrial and scientific uses

SECTION 2: Hazard identification

Emergency overview: no data available

GHS Hazard Category: no data available

label element:

Pictogram(s): no data available

Signal word: no data available

Hazard statement(s): no data available

Precautionary Statement(s):

Prevention: no data available

Response: no data available

Storage: no data available

Disposal: no data available

Classification of the substance or mixture: no data available

health hazard: no data available

Environmental hazard: no data available

SECTION 3 Composition/information on ingredients

Common names and synonyms	Concentration(Quality Score, %)	CAS No.
Terbium trihydride	100%	13598-54-4

SECTION 4: First-aid measures

Description of necessary first-aid measures :

If inhaontact: Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact: Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin: Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

Advice for Protecting Rescuers: Move the patient to a safe location. Consult a doctor. Show this chemical safety data sheet to the doctor who comes to the scene.

Special Note for Doctors: no data available

SECTION 5: Fire-fighting measures

Suitable extinguishing media :

Use dry chemical, carbon dioxide or alcohol-resistant foam.

Avoid using direct water to put out the fire, which may cause splashes of flammable liquids and spread the fire.

Specific hazards arising from the chemical :

no data available

Special protective actions for fire-fighters :

Firefighters must wear air-carrying respirators and full-body firefighting suits to put out the fire in the upwind direction.

Move the container from the fire area to an open area as much as possible.

Containers in fire must be evacuated immediately if they have discolored or emit sound from safety pressure relief devices.

Isolate the accident scene and prohibit unrelated persons from entering.

Contain and treat fire water to prevent environmental pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedure :

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye.

Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions:

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains.

Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up:

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage**Precautions for safe handling:**

Operators should be specially trained and strictly abide by the operating procedures. Operation and disposal should be carried out in a place with local ventilation or general ventilation facilities.

Avoid eye and skin contact and avoid breathing vapor.

See Section 8 for personal protective measures.

Keep away from fire and heat sources, and smoking is strictly prohibited in the workplace.

Use explosion-proof ventilation systems and equipment.

If canning is required, the flow rate should be controlled, and there should be a grounding device to prevent the accumulation of static electricity.

Avoid contact with incompatible substances such as oxidizing agents (see section 10 for incompatible substances).

When handling, it should be lightly loaded and unloaded to prevent damage to packaging and containers.

Empty containers may be harmful residues.

Wash hands after use and prohibit eating or drinking in the workplace.

Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emergency treatment equipment.

Conditions for safe storage, including any incompatibilities:

Store in a cool, ventilated warehouse.

Cooling temperature should not exceed 37°C.

It should be stored separately from oxidants and edible chemicals, and should not be mixed (see Section 10 for prohibited substances).

Keep container tightly closed.

Keep away from fire and heat sources.

The warehouse must be equipped with lightning protection equipment.

The exhaust system should be equipped with a grounding device to remove static electricity.

Use explosion-proof lighting and ventilation settings.

The use of spark-producing equipment and tools is prohibited.

Storage areas should be equipped with emergency release equipment and suitable containment materials.

SECTION 8: Exposure controls/personal protection

Occupational Exposure limit values:

Common names	CAS	Standard source	Limit	Notes
Terbium trihydride	13598-54-4	GBZ 2.1—2007	MAC: PC-TWA: PC-STEL:	

Biological limit values:

no data available

Monitoring method:

GBZ/T 160.1 ~ GBZ/T 160.81-2004 Determination of Toxic Substances in Workplace Air (Series of Standards), EN 14042 Workplace Air-Procedural Guidelines for Assessing Exposure to Chemical or Biological Agents

Appropriate engineering controls:

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

Individual protection measures, such as personal protective equipment (PPE):

Respiratory protection: If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Hand Protection: Wear rubber oil-resistant gloves.

Eye Protection: Wear chemical safety eye protection.

Skin and body protection: Wear protective clothing.

SECTION 9: Physical and chemical properties

Physical state: black or brown blocky solid

Vapour pressure (kPa) : no data available

pH: no data available

Density and/or relative density : no data available

Boiling point or initial boiling point and

Boiling range (°C) : no data available

Odor threshold (mg/m³) : no data available

Flash point (°C) : no data available

Solubility: no data available

Explosion limit [% (volume fraction)]: no data available

Odour: no data available

Melting point/freezing point (°C) : no data available	available
Auto-ignition temperature (°C) : no data available	Flammability : no data available
Decomposition temperature (°C) : no data available	Relative vapour density: no data available
Evaporation [(n-)butyl acetate in 1]: no data	Partition n-octanol/water (lg P) : no data available
	available
	Kinematic viscosity: no data available

SECTION 10: Stability and reactivity

Reactivity: Product is stable when stored and used at normal ambient temperature.

Possibility of hazardous reactions: no data available

Conditions to avoid: Electrostatic discharge, heat, humidity, etc.

Incompatible materials: no data available

Hazardous decomposition products: no data available

SECTION 11: Toxicological information

Acute toxicity:

Oral: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation:

no data available

Serious eye damage/irritation:

no data available

Respiratory or skin sensitization:

no data available

Germ cell mutagenicity:

no data available

Carcinogenicity:

no data available

Reproductive toxicity:

no data available

STOT-single exposure:

no data available

STOT-repeated exposure:

no data available

Aspiration hazard:

no data available

SECTION 12: Ecological information

Toxicity:

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

Persistence and degradability:

no data available

Bioaccumulative potential:

no data available

Mobility in soil:

no data available

SECTION 13: Disposal considerations

Waste chemicals :

Recycle as much as possible.

If it cannot be recycled, it should be disposed of by incineration.

Do not dispose of this product by discharging into a sewer.

Contaminated packaging:

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

Disposal Precautions:

Please refer to relevant national and local regulations before disposal.

See Section 8 for safety precautions for handling personnel.

SECTION 14: Transport information

UN Number: no data available

UN Proper Shipping Name: no data available

Transport hazard class(es): no data available

Packing group, if applicable: no data available

Wrapping method: Pack as recommended by the manufacturer, eg open steel drums. A normal wooden box outside the ampoule. Screw-top glass bottles, iron-covered glass bottles, plastic bottles or ordinary wooden boxes outside metal barrels (cans), etc.

Environmental hazards: no data available

Transport in bulk according to IMO instruments:

The transport vehicle shall be equipped with the corresponding variety and quantity of fire fighting equipment and leakage emergency treatment equipment.

It is strictly forbidden to mix and transport with oxidants, edible chemicals, etc.

The exhaust pipe of the vehicle in which this item is shipped must be equipped with a flame arrester.

There should be a grounding chain when using a tank (tank) truck for transportation, and a hole partition can be set in the tank to reduce the shock and static electricity.

It is forbidden to use mechanical equipment and tools that are prone to sparks for loading and unloading.

It is best to transport in the morning and evening in summer.

During transportation, it should be protected from exposure to sunlight, rain, and high temperature.

During the stopover, stay away from fire, heat sources and high temperature areas.
When transporting by road, it is necessary to drive according to the prescribed route, and do not stop in residential areas and densely populated areas.
It is forbidden to slip away during railway transportation.
It is strictly forbidden to use wooden boats and cement boats for bulk transportation.
Dangerous signs and announcements shall be posted on the means of transport according to relevant transportation requirements.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question:

Terbium trihydride CAS: 13598-54-4

European Inventory of Existing Commercial Chemical Substances (EINECS):

Listed

EC Inventory:

Listed

United States Toxic Substances Control Act (TSCA) Inventory:

Listed

China Catalog of Hazardous chemicals 2015:

Not Listed

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):

Listed

Korea Existing Chemicals List (KECL):

Listed

SECTION 16: Other information

Information on revision:

This edition is the 1.0 edition, prepared in accordance with GB/T 16483-2008, GB/T 17519-2013, GB 30000 series classification standards.

References:

[1] IPCS: International Chemical Safety Card (ICSC), website:

<http://www.ilo.org/dyn/icsc/showcard.home>.

[2] International Agency for Research on Cancer, website: <http://www.iarc.fr/>.

- [3] OECD Global Chemical Information Platform, website:
http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en.
- [4] US CAMEO Chemical Substance Database, website:
<http://cameochemicals.noaa.gov/search/simple>.
- [5] American Library of Medicine: Chemical Identification Database, URL:
<http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- [6] U.S. Environmental Protection Agency: Integrated Hazard Information System,
<http://cfpub.epa.gov/iris/>.
- [7] U.S. Department of Transportation: Emergency Response Guidelines, available at
<http://www.phmsa.dot.gov/hazmat/library/erg>.
- [8] German GESTIS-Hazardous Substances Database, website: <http://gestis-en.itrust.de/>.

Abbreviations and acronyms :

MAC: Maximum allowable concentration, which refers to the concentration of toxic chemicals that should not be exceeded in the workplace, within a working day, and at any time.

PC-TWA: Time-weighted average allowable concentration (permissible concentration-time weighted average), which refers to the average allowable exposure concentration of an 8-hour working day and a 40-hour working week specified with time as the weight.

PC-STEL: Permissible concentration-short term exposure limit, refers to the concentration that allows short-term (15 min) exposure under the premise of complying with PC-TWA.