



TERBIUM METAL LUMP CAS NO 7440-27-9

MATERIAL SAFETY DATA SHEET SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1 | Product identifiers Product name | : | Terbium Metal Lump | | | |
|--------------------------------|---|---|--|--|--|--|
| | CAS-No. | : | 7440-27-9 | | | |
| 1.2 | 1.2 Relevant identified uses of the substance or mixture and uses advised against | | | | | |
| | Identified uses | : | Laboratory chemicals, Industrial & for professional use only. | | | |
| 1.3 | .3 Details of the supplier of the safety data sheet | | | | | |
| | Company | : | Central Drug House (P) Ltd 7/28 Vardaan House New Delhi -110002 INDIA | | | |
| | Telephone Email | : | +91 11 49404040 <u>care@cdhfinechemical.com</u> | | | |
| 1.4 Emergency telephone number | | | | | | |
| | Emergency Phone # | : | +91 11 49404040 (9:00am - 6:00 pm) [Office hours] | | | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Flammable solids (Category 1), H228

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



| Signal word | Danger |
|------------------------------------|--|
| Hazard statement(s) H228 | Flammable solid. |
| Precautionary statement(s) P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| Supplemental Hazard Statements | none |

2.3 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

3.1 Substances

| Formula | : | Tb |
|------------------|---|--------------|
| Molecular weight | : | 158.93 g/mol |
| CAS-No. | : | 7440-27-9 |
| EC-No. | : | 231-137-6 |

No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture Terbium oxides

5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel.\'20 Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.\'20 Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Air and moisture sensitive. Handle under nitrogen, protect from moisture. Store under nitrogen. Storage class (TRGS 510): Flammable solid hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: lump Colour: grey

| | b) | Odour | No data available | | |
|------|--|--|--|--|--|
| | C) | Odour Threshold | No data available | | |
| | d) | рН | No data available | | |
| | e) | Melting point/freezing point | Melting point/range: 1,356 °C | | |
| | f) | Initial boiling point and boiling range | 3,230 °C | | |
| | g) | Flash point | No data available | | |
| | h) | Evaporation rate | No data available | | |
| | i) | Flammability (solid, gas) | The substance or mixture is a flammable solid with the category 1. | | |
| | j) | Upper/lower flammability or explosive limits | No data available | | |
| | k) | Vapour pressure | No data available | | |
| | I) | Vapour density | No data available | | |
| | m) | Relative density | 8.234 g/mL at 25 °C | | |
| | n) | Water solubility | No data available | | |
| | o) | Partition coefficient: n- octanol/water | No data available | | |
| | p) | Auto-ignition temperature | No data available | | |
| | q) | Decomposition temperature | No data available | | |
| | r) | Viscosity | No data available | | |
| | s) | Explosive properties | No data available | | |
| | t) | Oxidizing properties | No data available | | |
| 9.2 | Other safety information No data available | | | | |
| SECT | ION | 10: Stability and reactivi | ty | | |
| 10.1 | Reactivity No data available | | | | |
| 10.2 | Chemical stability Stable under recommended storage conditions. | | | | |
| 10.3 | Possibility of hazardous reactions No data available | | | | |

10.4 Conditions to avoid Heat, flames and sparks.

10.5 Incompatible materials Halogens, Strong acids

10.6 Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Terbium oxides Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity No data availableTerbium

Skin corrosion/irritation No data available(Terbium)

Serious eye damage/eye irritation No data available(Terbium)

Respiratory or skin sensitisation No data available(Terbium)

Germ cell mutagenicity No data available(Terbium)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available(Terbium)

Specific target organ toxicity - single exposure No data available(Terbium)

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available(Terbium)

Additional Information RTECS: Not available

SECTION 12: Ecological information

- 12.1 Toxicity No data available
- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available(Terbium)
- **12.5 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.

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

| UN number ADR/RID: - | IMDG: - | IATA: - |
|--|--|--|
| UN proper shipping nameADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA:Not dangerous goods | | |
| Transport hazard class(es) ADR/RID: - | IMDG: - | IATA: - |
| Packaging group ADR/RID: - | IMDG: - | IATA: - |
| Environmental hazards ADR/RID: no | IMDG Marine pollutant: no | IATA: no |
| Special precautions for user No data available | | |
| | ADR/RID: - UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods Transport hazard class(es) ADR/RID: - Packaging group ADR/RID: - Environmental hazards ADR/RID: no Special precautions for user | ADR/RID:IMDG: UN proper shipping name ADR/RID:IMDG:ADR/RID:Not dangerous goods IMDG:IMDG:Not dangerous goodsIATA:Not dangerous goodsIATA:Not dangerous goodsADR/RID:IMDG:Packaging group ADR/RID:IMDG:ADR/RID:IMDG:Environmental hazards ADR/RID: noIMDG Marine pollutant: noSpecial precautions for userIMDG Marine pollutant: |

SECTION 15: Regulatory information

- **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
- **15.2 Chemical safety assessment** For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H228 Flammable solid.

Further information

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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.