



MATERIAL SAFETY DATA SHEET

COMPLIES WITH 29 CFR 1910.1200.

OSHA HAZARD COMMUNICATION RULE

1. CHEMICAL IDENTITY

LABEL IDENTITY	Terbium Metal
CHEMICAL NAME/SYNONYMS	Terbium Metal
FORMULA	Tb
CHEMICAL FAMILY	Metal
CALCULATED MOLECULAR WEIGHT	158.9254
CAS REGISTRY NUMBER	7440-27-9

2. PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Silver gray metallic solid, odorless
BOILING POINT	3123
DENSITY (gm/cc)	8.2294
VAPOR PRESSURE @ 20°	ND
% VOLATILE BY VOLUME (%)	ND
REACTION WITH WATER	Reacts slowly with water to liberate
H2	
EVAPORATION RATE (H2O=1)	ND
SOLUBILITY IN WATER	ND
MELTING POINT	1360 ±4
OTHER	Tarnishes in moist air

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	Unknown
AUTOIGNITION TEMPERATURE (°C)	Unknown
EXTINGUISHING MEDIA	Agent for metal fires (like G-1 powder, MET-L-X, or TEC)
SPECIAL FIRE FIGHTING PROCEDURES	Do not use water!
UNUSUAL FIRE & EXPLOSION HAZARDS	Flammable in form of fine powder or dust



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4. HEALTH HAZARD INFORMATION

POSSIBLE EXPOSURE LIMITS: **Not Set**

EFFECTS OF OVEREXPOSURE:

IRRITATION: **Skin, Eye; mild transient**

CORROSIVITY: **None**

SENSITIZATION: **None**

LUNG EFFECTS: **May cause mild irritation. Extreme overexposure may cause pulmonary edema. As a lanthanide, terbium may act as a blood anticoagulant. No specific data is available for terbium. Handle with care.**

EMERGENCY FIRST AID:

INGESTION: **Induce vomiting, seek medical attention.**

DERMAL: **Flush with soap and water**

EYES: **Flush with plenty of water for at least 15 minutes**

INHALATION: **Remove to fresh air (problem for dust only)**

5. REACTIVITY DATA

STABILITY	Stable
CONDITIONS CONTRIBUTING TO UNSTABILITY	ND
INCOMPATIBILITY (MATERIALS TO AVOID)	Strong oxidizers, halogens
HAZARDOUS DECOMPOSITION PRODUCTS	None
HAZARDOUS POLYMERIZATION	ND
CONDITIONS TO AVOID	ND

6. SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Sweep or scoop up and remove.

WASTE DISPOSAL METHOD:

Not a hazardous waste. Ignite small quantities in well-vented hood to form oxide. Dispose of oxide with normal refuse.



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7. SPECIAL PROTECTIVE INFORMATION

VENTILATION REQUIREMENTS	Local exhaust
OTHER	Handle in dry box to prevent contact with air or moisture.
PROTECTIVE GLOVES	Neoprene
EYE PROTECTION	Safety glasses
RESPIRATOR	If dust is being generated a half-mask air purifying respirator should be worn.
OTHER PROTECTIVE EQUIPMENT	Normal laboratory wear.

8. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

Wash thoroughly after handling. Do not breathe dust, vapor, mist, gas. Keep container closed. Keep away from heat, sparks, and open flames. Store in tightly closed containers.

TRANSPORTATION REQUIREMENTS	DOT CLASS:	Flammable solid
	UN NUMBER:	1325
	IMCO CLASS:	4.3

OTHER:

PRECAUTIONARY LABELING **NONE**

A note concerning handling precautions of some chemicals:

Some of the chemicals listed herein are research or experimental substances which may be toxic, as defined by various governmental regulations. In accordance with Environmental Protection Agency regulations, these materials should only be handled by, or under the direct supervision of, a "technically qualified individual", as defined in 40 CFR, par 710.0(na).

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

NA= NOT APPLICABLE

ND= NO DATA FOUND