



MATERIAL SAFETY DATA SHEET
COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

REVISED DATE: 8-2-2000

CHEMICAL IDENTITY

LABEL IDENTITY	Erbium
CHEMICAL NAME/SYNONYMS	Erbium
FORMULA	Er
CAS REGISTRY NUMBER	7440-52-0
HAZARDOUS INGREDIENTS	None Listed

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Silver metallic turnings
BOILING POINT	NA
DENSITY (gm/cc)	NA
VAPOR PRESSURE @ 20°	NA
% VOLATILE BY VOLUME (%)	NA
REACTION WITH WATER	NA
EVAPORATION RATE (H ₂ O=1)	NA
SOLUBILITY IN WATER	NA
MELTING POINT	NA
MOLECULAR WEIGHT	167.26

FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA	Use water spray, dry chemical, carbon Dioxide, or appropriate foam.
GENERAL INFORMATION	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved for equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.



ERBIUM METAL MATERIAL SAFETY DATA SHEET

HEALTH HAZARD INFORMATION

TOXICITY DATA otr-ham: emb 380umo1/L dnd-ham: emb 380umo1/L

HMIS RATING:

HEALTH: **3** FLAMMABILITY: **0** REACTIVITY: **1** PERSONAL PROTECTION: **I**

ROUTES OF ENTRY

INHALATION: **Yes**
SKIN: **Yes**
INGESTION: **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Respiratory disorders**

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **respiratory irritant. Irritation, sneezing, coughing, difficulty breathing and pulmonary edema possible.**

DERMAL: **itching, redness, inflammation and dermatitis possible.**

EYE: **irritation, watering, redness, possibility of burns and tissue damage.**

OTHER: INGESTION: **nausea, vomiting, salivation, stomach cramps, dizziness, and diarrhea possible. May cause liver, kidney and nervous system damage with chronic exposure.**

SEE ATTACHED SHEET

CARCINOGENICITY: **None** NTP: **no** IARC MONOGRAPHS: **no** OSHA REGULATE: **no**

EMERGENCY FIRST AID PROCEDURES:

INGESTION: **Never give anything by mouth to an unconscious person. Get medical aid. DO NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.**

INHALATION: **Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.**

SKIN CONTACT: **Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.**

EYE CONTACT: **Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.**

REACTIVITY DATA

STABILITY

Stability unknown

INCOMPATIBILITY (MATERIALS TO AVOID)

Strong oxidizing agents, strong acids, halogens.

HAZARDOUS DECOMPOSITION PRODUCTS

Irritating and toxic fumes and gases

HAZARDOUS POLYMERIZATION

Has not been reported.

CONDITIONS TO AVOID

Incompatible materials



ERBIUM MATERIAL SAFETY DATA SHEET

SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Provide ventilation.**

WASTE DISPOSAL METHOD:

Dispose of in a manner consistent with federal, state, and local regulations.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION: **NIOSH-approved dust-mist-fume cartridge respirator**

LOCAL EXHAUST: **Maintain exposure below TLV**

MECHANICAL (general): **Recommended**

PROTECTIVE GLOVES: **Neoprene**

EYE PROTECTION: **Safety glasses**

OTHER PROTECTIVE EQUIPMENT: **Wear protective clothing to prevent skin/clothing contact.**

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: **Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.**

TRANSPORTATION REQUIREMENTS

DOT CLASS: **NA**

UN NUMBER: **NA**

IMCO CLASS: **NA**

OTHER: **NA**

PRECAUTIONARY LABELING

NONE

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

NR=NOT RECORDED