



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

**DATE OF LAST REVISION: 09-29-95**

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## CHEMICAL IDENTITY

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|                       |                       |
|-----------------------|-----------------------|
| LABEL IDENTITY        | <b>EUROPIUM INGOT</b> |
| FORMULA               | <b>Eu</b>             |
| CHEMICAL FAMILY       | <b>LANTHANIDE</b>     |
| HAZARDOUS INGREDIENTS | <b>NONE LISTED</b>    |

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## PHYSICAL AND CHEMICAL PROPERTIES

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|--------------------------|-----------------------------------|
| COLOR, FORM AND ODOR     | <b>Steel gray metal, Odorless</b> |
| BOILING POINT            | <b>1439° C</b>                    |
| VAPOR DENSITY            | <b>NA</b>                         |
| VAPOR PRESSURE           | <b>Essentially 0</b>              |
| % VOLATILE BY VOLUME (%) | <b>0</b>                          |
| SPECIFIC GRAVITY         | <b>5.26</b>                       |
| EVAPORATION RATE (H2O=1) | <b>0</b>                          |
| SOLUBILITY IN WATER      | <b>Reacts</b>                     |
| MELTING POINT            | <b>826</b>                        |

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## FIRE AND EXPLOSION HAZARD DATA

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|----------------------------------|--|
| FLASH POINT                      | <b>NA</b>  |
| FLAMMABLE LIMITS                 | <b>NA</b>  |
| EXTINGUISHING MEDIA              | <b>Dry sand or powder for metal powders.</b>   |
| SPECIAL FIRE FIGHTING PROCEDURES | <b>Wear a self-contained breathing apparatus</b>   |
| UNUSUAL FIRE & EXPLOSION HAZARDS | <b>Bismuth powder has a moderate fire hazard when exposed to flame and by chemical reaction with oxidizing agents.</b> |



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### HEALTH HAZARD INFORMATION

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#### EMERGENCY FIRST AID PROCEDURES:

INGESTION: **No available data but one should obtain medical attention.**

INHALATION: **No specific information, one should obtain medical attention.**

SKIN CONTACT: **Remove contaminated clothing, flood skin with large amounts of water.**

EYE CONTACT: **Immediately flush eyes, including under eyelids, with large amounts of Water.**

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### REACTIVITY DATA

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STABILITY

**Stable**

CONDITIONS TO AVOID

**Incompatibles**

INCOMPATIBILITY (MATERIALS TO AVOID)

**Strong acids, strong oxidizing agents,  
Halogens, air, moisture**

HAZARDOUS DECOMPOSITION PRODUCTS

**Toxic fumes**

HAZARDOUS POLYMERIZATION

**Will Not Occur**

OTHER

**May ignite spontaneously on cutting  
or filing. Material may burn  
spontaneously when exposed to  
air. Material liberates hydrogen gas  
when in contact with water.**

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### SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **Wear full protective Equipment, cover spill with dry sand or vermiculite. Mix well and carefully transfer to a Container.**

WASTE DISPOSAL METHOD: **Dispose of in accordance with local, state and federal regulations.**

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### SPECIAL PROTECTIVE INFORMATION

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RESPIRATORY PROTECTION  
VENTILATION REQUIREMENTS

**High efficiency particle respirator.  
Glove bag or box with a dry inert  
atmosphere**

MECHANICAL (general)

**NA**

SPECIAL

**NA**

OTHER

**NA**

PROTECTIVE GLOVES

**Rubber Gloves**

EYE PROTECTION

**ANSI approved safety goggles**



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OTHER PROTECTIVE EQUIPMENT **NA**

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### SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

**Store under mineral oil or argon.**

OTHER PRECAUTIONS:

**Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.**

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NA = NOT APPLICABLE

ND = NO DATA

NC = NOT CLASSIFIED