

Material Safety Data Sheet

Identity: Europium

Formula: Eu

SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 151.965

CAS #	OSHA PEL	ACGIH TLV	%
7440-53-1	N/A	N/A	0-100

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Appearance and odor: Lustrous gray solid, odorless

Boiling Point: 1597 °C @ 760mm Hg

Vapor Pressure (vs. air or mmHg): N/A

Melting Point: 822 °C

Density: 5.24g/cm³ at 25 °C Evaporation

Rate: N/A

Flash Point: N/A

Solubility in water: Insoluble

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Explosive Limits: LEL: N/A UEL: N/A

Extinguishing Media:

Use dry chemical, class D extinguisher, DO NOT USE WATER

Special Fire Fighting Procedures:

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire and Explosion Hazards:

Product is flammable when wet and highly oxidizable in air. May spontaneously combust in air in finely divided form. Will immediately react with water, liberating flammable, explosive hydrogen gas

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (stability): moisture, dusting conditions, electric arcs, open flame, sparks

Incompatibility: moisture, strong acids, strong oxidizing agents, acid chlorides, halogens

Hazardous Decomposition or Byproducts: Hydrogen

Hazardous Polymerization: will not occur

Conditions to avoid (hazardous polymerization): same as above

SECTION VI - HEALTH HAZARD DATA

Health Hazards (Acute and Chronic):

Inhalation: Low acute toxicity, may cause upper respiratory tract irritation

Ingestion: Low oral toxicity

Skin: Skin absorption not likely, however, may cause redness, itching, and swelling

Eye: Will react with moisture to cause severe irritation

Carcinogenicity: NTP? No

IARC Monographs? No

OSHA Regulated? No

Medical Conditions Aggravated by Exposure: Pre-existing respiratory problems

Emergency and First Aid Procedures:

Inhalation: Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

Ingestion: Give 1-2 glasses of milk or water seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

Skin: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

Eye: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Place in a closed container for proper disposal. Take care not to raise dust. DO NOT USE WATER. USE NON-SPARKING TOOLS.

Waste disposal method:

Dispose of in accordance with state, local, and federal regulations. DO NOT FLUSH

Hazard Label Information:

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling. Store under mineral oil or under inert gas or vacuum.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary (Hazard Label Information):

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

Ventilation:

Local Exhaust: To maintain concentration at low exposure levels.

Mechanical (General): Recommended.

Work/Hygienic/Maintenance Practices:

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Notes: Pinholes may occur in thin foils as metal ages.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established