

Plasmaterials, Inc.
 2268 Research Drive
 Livermore, CA 94550
 Ph: (925) 447-4030 Fx: (925) 447-4031
<http://plasmaterials.com>

MATERIAL SAFETY DATA SHEET

Section 1- PRODUCT IDENTIFICATION

COMPOSITION Sm	PRODUCT NAME Samarium
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Section 2- HAZARDOUS INGREDIENTS

Note: Products under normal conditions do not represent an inhalation, ingestion or contact health hazard.

MATERIAL OR COMPONENT	CAS NUMBER	WT%	EXPOSURE LIMITS	
			OSHA PEL (Mg/M3)	ACGIH TLV(MG/M3)
Samarium	7440-19-9	100%	No Data	

Section 3- PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS) <input type="checkbox"/> Liquid <input type="checkbox"/> Solid <input type="checkbox"/> Gas <input type="checkbox"/> Other	APPEARANCE AND ODOR Whitish-grey metallic solid. Odorless
MELTING POINT (BASE METAL) 1072°	SPECIFIC GRAVITY

Section 4- FIRE AND EXPLOSION

Flash Point (Method Used) N/A	Flammable Limits Flammable Solid	LEL N.A.	UEL N.A.
EXTINGUISHING MEDIA DO NOT USE WATER! Agents for metal fires such as powdered limestone, sand, graphite, MET-L-X, or TEC.			
SPECIAL FIRED FIGHTING PROCEDURES DO NOT USE WATER. Smother fire with Class D fire extinguishing or allow to burn.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Explosions can occur if water is added to a samarium fire. Finely divided samarium dust powders, like most metal powders are potential explosion hazards when exposed to sparks, open flame or high heat source.			

Section 5- REACTIVITY DATA

STABILITY Stable	INCOMPATABILITY (MATERIALS TO AVOID) Halocarbons reducing agents, strong acids & halogens
CONDITIONS TO AVOID Ignition sources, sparks, open flames. Samarium metal can burn in air, carbon dioxide, or nitrogen. Contact with moisture/water.	
HAZARDOUS DECOMPOSITION PRODUCTS NONE	

Section 6- HEALTH HAZARD GUIDE

MAJOR EXPOSURE HAZARD

Inhalation **Skin** **Skin Absorption** **Eye Contact** **Ingestion**

EFFECTS OF OVEREXPOSURE

INHALATION: A mild irritant. Extreme overexposure can cause pulmonary edema. No data available for long term effects.

DERMAL/EYE CONTACT: A mild irritant to skin and eyes. May be corrosive in contact with moist skin

OTHER: As a lanthanon it may cause impairment of blood clotting.

EMERGENCY & FIRST AID PROCEDURES

INHALATION: Remove from exposed area to fresh air.

INGESTION: Give 1-2 glasses of milk or water and induce vomiting.

SKIN CONTACT: Brush material off skin. Wash affected area with soap & water.

EYE CONTACT: Flush eyes with lukewarm water lifting up the upper and lower lids for at least fifteen minutes.

Section 7- SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCUDRES

Scoop or sweep up spill and place in container for disposal. Take care not to raise dust.

WASTE DISPOSAL METHODS

Powders should be mixed with an excess of sand or soil and disposed of with normal refuse, in accordance with appropriate regulations.

Section 8- SPECIAL PROTECTION

RESPIRATORY

NIOSH-MESA approved respirator providing protection against dust of not less than 0.05mg/m³.

VENTILATION

Local Exhaust: To control build up of dusts. Mechanical: Adequate for no-dusty work.

EYE PROTECTION & PROTECTIVE CLOTHING

Wear Safety glasses for eyes. Wear neoprene gloves on hands. Protective gear to avoid skin and clothing contamination.

Section 9- SPECIAL PRECAUTIONS

WORK/HYGIENIC/MAINTENANCE PRACTICES:

Store in a cool dry area. Keep containers closed. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking.

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