

Material Safety Data Sheet

Identity: Praseodymium

Formula: Pr

Chemical Family: Lanthanides

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 we assume no liability resulting from its use.

SECTION II - PRODUCT INFORMATION/HAZARDOUS INGREDIENTS

CAS #	%	OSHA/PEL	ACGIH/TLV
7440-10-0	100	15 mg/m ³ (dust), 5 mg/m ³ (resp)	10 mg/m ³ total dust

SECTION III - PHYSICAL/ CHEMICAL CHARACTERISTICS

Boiling Point: 3512°C	Specific Gravity (Water =1) 6.77
Melting Point: 931°C	Vapor Pressure: N/A
Vapor Density: N/A	Evaporation Rate: N/A
Solubility in water: Decomposes	Percent Volatile: NA
Physical Form: Silver metallic, no order	

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point: NAExtinguishing Media: Dry chemical, Class D extinguisher. DO NOT USE WATER.

Fire fighters must wear full face self-contained breathing apparatus and protective clothing.
Fumes from fire are hazardous.

Unusual Fire and Explosion Hazards: May react with water or steam when heated to produce flammable hydrogen gas. May react with air.

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid – Avoid heat, moisture.

Incompatibility - Materials to avoid: Air, water, halogens, acids and oxidizing agents.

Hazardous Decomposition Products: Hydrogen Gas

Hazardous Polymerization: Will not occur

VI - HEALTH HAZARD DATA

Routes of Exposure:

Inhalation:

Acute: May cause irritation of respiratory tract and mucous membrane. Dusts may cause asthma attacks and lung granuloma.

Chronic: May cause writhing, loss of muscle coordination, labored respiration, sedation, hypotension, and cardiovascular failure.

Emergency: Remove victim to fresh air, keep warm and quiet, give oxygen if breathing is difficult. Call a physician.

Ingestion:

Acute: May cause gastrointestinal irritation.

Chronic: May affect the coagulation rate of the blood.

Emergency: Give 1 – 2 glasses of milk or water to conscious person, induce vomiting. Seek medical attention.

Skin:

Acute: May cause irritation, rashes and skin granulomas.

Chronic: May cause dermatitis, sensitivity to heat, itching and skin lesions.

Emergency: Remove contaminated clothing, wash affected area with mild soap and water, seek medical attention if irritation persists.

Eyes:

Acute: May cause irritation. Chronic: No chronic effects recorded.

Emergency: Flush eyes and under eyelids with lukewarm water, for at least 15 minutes. Seek medical attention if irritation persists.

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-control measures. Isolate spill area and provide ventilation. Sweep up and place in an appropriate closed container. Vacuuming should be prohibited. Use non-sparking tools. Clean up residual material by washing area with water

Waste Disposal Method: Dispose of in accordance with local, state and federal regulations.

Precautions to be taken in Handling and Storage: Praseodymium metal is air and moisture sensitive. Handle in and inert gas such as argon and store under oil.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary - Hazard Label Information NIOSH

approved respirator Impervious gloves Safety glasses

Clothes to prevent skin contact

Respiratory Protection (Specify Type):

Ventilation: Use local exhaust to maintain concentration at low levels. Handle in and inert gas such as argon, in a controlled process.

Other Protective Clothing or Equipment: Protective gear suitable to prevent contamination

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 and smoking. Do not blow dust off clothing or skin with compressed air.