

Material Safety Data Sheet

Identity: Neodymium oxide

Formula: Nd₂O₃

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

CAS #	OSHA PEL	ACGIH TLV	Other	%
1313-97-9	NE	NE		100%

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States:

Boiling Point: 4118 °C

Vapor Pressure (vs. air or mmHg):

Melting Point:

Vapor Density: Not applicable

Evaporation Rate (butyl acetate=1): Not applicable

Percent Volatile: Essentially zero

Solubility in water: Insoluble

Specific Gravity: (H₂O=1): 7.24

Freezing/Melting Point: 2270 °C

Appearance and odor: Light blue powder, odorless

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Flash Point: (F) Not applicable*Extinguishing Media:* Non-combustible. If involved in a fire, use water, carbon dioxide, dry chemical extinguishing agents, dry sand, or dry ground dolomite.*Special Fire Fighting Procedures:* No special firefighting procedures needed. Use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing: hats, boots, and gloves. If without risk, remove material from fire area. Cool container with water from maximum distance.

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (stability): No data

Incompatibility: Strong acids.

Hazardous Decomposition or Byproducts: No data

Hazardous Polymerization: Will not occur

Conditions to avoid (hazardous polymerization): Thermal decomposition

Other: Hygroscopic: absorbs CO₂ from air.

SECTION VI - HEALTH HAZARD DATA

Effects of Exposure: Ingestion:

None Known Skin

Contact: None Known Eye

Contact: None Known

Inhalation: Chronic inhalation of rare earth oxides may lead to congestion, coughing, granuloma in lungs and hemoglobinemia.

Emergency and First Aid Procedures:

Inhalation: No data available but one should obtain medical attention.

Ingestion: No data available but one should obtain medical attention.

Skin: Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.

Eye: Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes. Call a physician.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

RCRA Code: None

TSCA Registered: Yes

Spill and Leak Procedures: Wearing full protective equipment, cover spill with dry sand or vermiculite. Mix well and carefully transfer to a container.

Waste Disposal: Consult state, local or federal EPA regulations for proper disposal.

Handling and Storage: Keep container tightly closed. Store in a cool, dry well-ventilated area. Wash thoroughly after use.

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

SECTION VIII - CONTROL MEASURES

Ventilation Requirements: Laboratory fume hood
Respiratory Protection: High efficiency particle respirator
Protective Gloves: Rubber
Eye/Face Protection: ANSI approved safety goggles.

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.

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