



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

**DATE OF LAST REVISION: 06-06-04**

---

## CHEMICAL IDENTITY

---

LABEL IDENTITY	<b>NEODYMIUM</b>	
CHEMICAL NAME/SYNONYMS	<b>NEODYMIUM</b>	
FORMULA	<b>Nd</b>	
CHEMICAL FAMILY	<b>METAL</b>	
CAS REGISTRY NUMBER	<b>7440-00-8</b>	
HAZARDOUS INGREDIENTS	<b>NEODYMIUM, TSCA CERTIFIED</b>	
<b>NEODYMIUM:</b>	<b>%</b>	<b>ACGIH(TLV)</b>
	<b>99</b>	<b>OSHA(TWA)</b>
		<b>15mg/m3 (TWA)</b>
		<b>total dust</b>
		<b>10mg/m3 total dust</b>
		<b>5mg/m3 respirable</b>

---

## PHYSICAL AND CHEMICAL PROPERTIES

---

COLOR, FORM	<b>Silver solid (ingot, chunk, foil powder)</b>
ODOR	<b>Odorless</b>
BOILING POINT	<b>5554°F</b>
DENSITY (gm/cc)	<b>NA</b>
VAPOR PRESSURE @ 20°	<b>NA</b>
% VOLATILE BY VOLUME (%)	<b>Zero</b>
REACTION WITH WATER	<b>NA</b>
EVAPORATION RATE (H2O=1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Insoluble</b>
MELTING POINT	<b>1870°F</b>
SPECIFIC GRAVITY	<b>6.80 - 7.01</b>

---

## FIRE AND EXPLOSION HAZARD DATA

---

FLASH POINT	<b>NA</b>
AUTOIGNITION TEMPERATURE (°C)	<b>NA</b>
FLAMMABILITY	<b>Non-Flammable Solid (Target, Ingot)</b> <b>Flammable Solid (Foil, Powder)</b>
EXTINGUISHING MEDIA	<b>Dry chemical, class D extinguisher, DO NOT USE WATER</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>Avoid creating fine dusts, because as a powder this product is capable of creating a dust explosion.</b>



## NEODYMIUM MATERIAL SAFETY DATA SHEET

---

### HEALTH HAZARD INFORMATION

---

TOXICITY DATA **NO DATA**

HMIS RATING:

HEALTH: **nd** FLAMMABILITY: **nd** REACTIVITY: **nd** PERSONAL PROTECTION: **nd**

ROUTES OF ENTRY

INHALATION: **Yes**  
SKIN: **Yes**  
INGESTION: **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **ND**

EFFECTS OF OVEREXPOSURE (acute and chronic):

SWALLOWING: **evidence suggests low toxicity potential due to poor absorption by the oral route.**

SKIN ABSORPTION: **evidence suggests low toxicity potential due to poor skin absorption.**

INHALATION: **may be harmful if inhaled. Good industrial hygiene practice suggest limiting exposure to all respirable particulate.**

SKIN/EYE CONTACT: **may cause skin/eye irritation**

OTHER: **has anticoagulant effect when given intravenously.**

---

CARCINOGENICITY: **no** NTP: **no** IARC MONOGRAPHS: **no** OSHA REGULATE: **no**

---

EMERGENCY FIRST AID PROCEDURES:

INGESTION: **if victim is conscious induce vomiting**

INHALATION: **remove from area, give CPR if not breathing and oxygen if breathing**

SKIN CONTACT: **wash with soap & water for 5 minutes, remove clothing & shoes and clean them thoroughly before reuse.**

EYE CONTACT: **flush eyes immediately with plenty of water for at least 15 minutes, using eyewash fountain, lift upper and lower lids and rinse well.**

---

### REACTIVITY DATA

---

STABILITY

**Stable**

CONDITIONS CONTRIBUTING TO UNSTABILITY  
INCOMPATIBILITY (MATERIALS TO AVOID)

**Heat & water, avoid creating dusts  
Strong acids & oxidizing agents and  
Halogens**

HAZARDOUS DECOMPOSITION PRODUCTS

**Not known**

HAZARDOUS POLYMERIZATION

**Will Not Occur**

CONDITIONS TO AVOID

**NA**



## NEODYMIUM MATERIAL SAFETY DATA SHEET

---

### SAFE HANDLING AND USE

---

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **eliminate all sources of ignition. Evacuate area. Wear protective gear. Sweep into the appropriate container. Avoid creating dust. DO NOT USE "SHOP" VACUUM, this will cause a fire. Ventilate area. Wash spill after pick up is complete.**

WASTE DISPOSAL METHOD:

**Consult federal, state and local regulations for proper disposal.**

SARA TITLE III HAZARD CLASSIFICATION: **Fire Hazard & Reactive Hazard**

---

### SPECIAL PROTECTIVE INFORMATION

---

RESPIRATORY PROTECTION	<b>NIOSH approved dust mask</b>
LOCAL EXHAUST	<b>NA</b>
MECHANICAL (general)	<b>NA</b>
VENTILATION REQUIREMENTS	<b>Provide adequate ventilation, use local local exhaust as needed to maintain airborne exposure below control limits</b>
PROTECTIVE GLOVES	<b>Recommended</b>
EYE PROTECTION	<b>Safety glasses with side shields, Chemical workers dust proof goggles (under dusting conditions)</b>
OTHER PROTECTIVE EQUIPMENT	<b>Maintain a sink, safety shower and eyewash fountain in the work area. Have oxygen readily available.</b>

---

### SPECIAL PRECAUTIONS

---

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: **wash thoroughly after use**

TRANSPORTATION STATUS: **Powder & thin foil: flammable solid, n.o.s. (Nd metal), UN 1325  
Ingot/chunk: not regulated  
Reportable quantity (RO), under U.S. EPA CERCLA: None listed**

PRECAUTIONARY LABELING: **NONE**

---

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

**NA= NOT APPLICABLE**

**ND= NO DATA FOUND**

**NR=NOT RECORDED**