MATERIAL SAFETY DATA SHEET
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 06-06-04

CHEMICAL IDENTITY

LABEL IDENTITY
CHEMICAL NAME/SYNONYMS NEODYMIUM
FORMULA Nd
CHEMICAL FAMILY METAL
CAS REGISTRY NUMBER 7440-00-8
HAZARDOUS INGREDIENTS NEODYMIUM, TSCA CERTIFIED

NEODYMIUM: % ACGIH(TLV) OSHA(TWA)
99 15mg/m3 (TWA) 10mg/m3 total dust

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

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

Heat & water, avoid creating dusts

INCOMPATIBILITY (MATERIALS TO AVOID)

Strong acids & oxidizing agents and Halogens

HAZARDOUS DECOMPOSITION PRODUCTS

Not known

HAZARDOUS POLYMERIZATION

Will Not Occur

CONDITIONS TO AVOID

NA
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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
NIOSH approved dust mask

LOCAL EXHAUST
NA

MECHANICAL (general)
NA

VENTILATION REQUIREMENTS
Provide adequate ventilation, use local exhaust as needed to maintain airborne exposure below control limits

PROTECTIVE GLOVES
Recommended

EYE PROTECTION
Safety glasses with side shields, Chemical workers dust proof goggles (under dusting conditions)

OTHER PROTECTIVE EQUIPMENT
Maintain a sink, safety shower and eyewash fountain in the work area. Have oxygen readily available.

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 CERCIA: None listed

PRECAUTIONARY LABELING: NONE

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NA= NOT APPLICABLE   ND= NO DATA FOUND   NR= NOT RECORDED