

MATERIAL SAFETY DATA SHEET

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SECTION 1-IDENTIFICATION

Product Code: 12957 Revision Date: 4/12/88
Product Name: Nickel lump
Synonyms: None known
Chemical Family: Metallic element
CASH: 7440-02-0
Molecular Formula: Ni

SECTION 2-INGREDIENTS

Chemical: Nickel

CASH	%	PEL	TLV
7440-02-0	100	1 mg/m ³	0.05mg/m ³

SECTION 3- PHYSICAL DATA

Boiling Point: 2730°C
% Volatiles: 0
Solubility in Water : Insoluble
Specific Gravity (H₂O=1): 8.908
Freezing/Melting Point: 1453°C
Evaporation Rate (butyl acetate=1): 0
Vapor Density (air=1): Not applicable
Vapor Pressure : Essentially zero
Appearance and Odor: Silver metallic element, odorless
Other: No data

SECTION 4-FIRE AND EXPLOSION HAZARD DATA

Flash Point:(°F) Not applicable
Flammable Limits in Air, % by volume: Lower Not applicable
Upper Not applicable
Autoignition Temperature: No data
Extinguishing Media: If involved in fire do not use water or CO₂. Use 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.

SECTION 5-HEALTH DATA

OSHA (PEL): 1 mg/m³
ACGIH (TLV): 0.05 mg/m³

A. ANIMAL TOXICITY

LD₅₀: No data
LC₅₀: No data
Other: Intravenous-mouse LDLo: 50mg/kg
Intravenous-dog LDLo: 10mg/kg

B.EFFECTS OF EXPOSURE

ACUTE EFFECTS

Ingestion: Ingestion of nickel salts may cause vomiting, watery or bloody diarrhea, hemolysis, hematuria, anuria, jaundice, convulsions and collapse.

Skin Contact: May cause "nickel itch", a sensitization reaction causing itching, burning, erythema and eczema.

Eye Contact: Powder or dust may cause irritation

Inhalation: Powder or dust may cause irritation. Nickel metal is a pulmonary sensitizer.

Medical Conditions, if any, Aggravated by the Chemical: None known

Other Health Hazards: None known

Most Likely Routes of Entry: Ingestion

CHRONIC EFFECTS

Ingestion: None known

Skin Contact: None known

Eye Contact: None known

Inhalation: Studies show an increased incidence of cancer of the nasal cavity, lung and possibly larynx in nickel refinery workers.

Other: Cancer reasonably anticipated by NTP; limited evidence of cancer to humans by IARC. Nickel has caused local sarcomas in laboratory animals when given intramuscularly.

C. EMERGENCY AND FIRST AID PROCEDURES

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

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

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

Inhalation: No specific information available, one should obtain medical attention.

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SECTION 6-REACTIVITY

Incompatibility: Acids, oxidizing agents, sulfur, titanium, ammonium nitrate, potassium perchlorate, hydrazoic acid, aluminum, aluminum trichloride, p-dioxane, hydrogen, methanol, combustible substances, selenium, phosphorus, fluorine, performic acid
Hazardous Decomposition Products: Contact with acids liberates hydrogen, a flammable and explosive gas.
Conditions to Avoid: Incompatibles
Stability: Stable
Hazardous Polymerization: Will not occur
Other: No data

SECTION 7-ENVIRONMENTAL INFORMATION

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.

SECTION 8-PROTECTION INFORMATION

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

SECTION 9-SPECIAL PRECAUTIONS

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 10-TRANSPORTATION INFORMATION-U.S. D.O.T.

Per 49CFR 172.101
Proper Shipping Name: Not regulated
Hazard Classification: None
UN #: None

SECTION 11-COMMENTS

Warning: May cause lung cancer.

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

