



Safety Data Sheet

Nickel

SECTION 1: PRODUCT DESCRIPTION

PRODUCT IDENTIFIER

Product form: Solid
Product Name: Nickel Metal (bars, balls, pieces)
Formula: Ni

SUPPLIER

NATHAN TROTTER & COMPANY
241 W. STEWART HUSTON DRIVE
COATESVILLE, PA 19320
PH. 610-524-1440
FX. 610-524-2496

INTENDED USE OF PRODUCT

Use: Industrial; professional use only

EMERGENCY TELEPHONE NUMBER

CHEMTREC 24 HR Emergency number: 1-800-424-9300
INTERNATIONAL CHEMTREC call: 1-703-527-3887

SECTION 2: HAZARD IDENTIFICATION

GHS CLASSIFICATION: Skin sensitization - Skin, cat. 1, Carcinogenicity, cat. 2, Specific target organ toxicity, repeated or prolonged exposure, cat. 1,

HAZARD STATEMENTS:

H317: May cause an allergic skin reaction.
H351: Suspected of causing cancer
H372: Causes damage to organs through prolonged or repeated exposure.



Signal Word:

DANGER

PRECAUTIONARY STATEMENTS:

P264: Wash hands thoroughly after handling
P270: Do not eat, drink, or smoke when using this product
P272: Contaminated clothing should not be taken out of the workplace
P260: Do not breathe dust/fumes/gas/mist/vapors/spray.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood
P261: Avoid breathing in dust or fumes.
P280: Wear protective gloves/clothing and face/eye protection.
P302+P352: IF ON SKIN: wash with plenty of water.
P333+P313: IF skin irritation or rash occurs: Get medical advice/attention.
P308+P313: If exposed or concerned, get medical advice.
P391: Collect spillage
P501: Dispose of contents in accordance with local and federal regulations

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE

Name	Product Identifier	%	Classification (GHS-US)
Nickel Metal	7440-02-0	100	See section 2

MIXTURE: Precautionary Statements: Not Applicable

SECTION 4: FIRST AID MEASURES

General First-aid Measures: Under normal handling and use, exposure to solid forms of this material present few health hazards. Subsequent operations such as grinding, melting or welding may produce hazardous dust or fumes which can be inhaled or come in contact with the skin or eyes. Emergency responders should take care to avoid secondary exposure to nickel particulate. Wear appropriate protective equipment.

INHALATION: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

INGESTION: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

SKIN: After contact with skin, wash immediately with plenty of water

EYES: Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical attention.

SECTION 5: FIRE FIGHTING PROCEDURES

Extinguishing Media: Use media suitable to extinguish surrounding fire.

Unsuitable Extinguishing Media: None.

Specific Hazards Arising from the Material: This product does not present fire or explosion hazards as shipped. Fine dust from processing may ignite if allowed to accumulate and subjected to an ignition source. When heated to high temperatures, nickel oxide may be produced, keep containers cool with water spray.

Special Protective Equipment and Precautions for Firefighters: Full face, self-contained breathing apparatus and full protective clothing when necessary.

SECTION 6: SPILL OR LEAK MEASURES/PROCEDURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate respiratory and protective equipment specified in section 8. Avoid creating dusts. Avoid breathing dust or fume. Isolate spill area and provide ventilation.

Methods and Materials for Containment and Cleaning Up: For larger pieces - pick up mechanically. For chips or dust - vacuum spill using a system equipped with a HEPA filtration system and place in properly labeled closed containers. Special precautions must be taken when changing filters on HEPA vacuum cleaners used to clean up hazardous materials. Caution should be taken to minimize airborne generation of particulate and avoid contamination of air and water.

Environmental Precautions: Do not allow to enter drains or to be released to the environment.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Handle in a well-ventilated area. Avoid creating dust. Avoid exposure to high temperature. Avoid breathing dust or fumes. Avoid contact with skin and eyes. Wash thoroughly before eating or smoking. See section 8 for information on personal protection equipment.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a sealed container. Store in a cool, dry area. See section 10 for more information on incompatible materials.

SECTION 8: PROTECTION INFORMATION

CHEMICAL NAME: Nickel, METAL

<u>TWA</u>	<u>ACGIH</u>	<u>STEL</u>	<u>TWA</u>	<u>OSHA PEL</u>	<u>STEL</u>
1.5 MG/M3 (INHALABLE FRACTION)		N/A	1.0 MG/M3		N/A

CONTROL

ENGINEERING MEASURES: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Lab coat, apron, eye wash, safety shower.

RESPIRATORY PROTECTION: When potential exposures are above the occupational limits, approved respirators must be used. Respiratory protection may be required in addition to ventilation depending upon conditions of use.

EYE PROTECTION: Wear chemical splash goggles when handling this product. Have an eye wash station available.

SKIN PROTECTION: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

PARAMETERS/

SECTION 9: PHYSICAL DATA

FORMULA: Ni

MOLECULAR WEIGHT: 58.71 g/mol

APPEARANCE: Metallic grey silver solid

ODOR: No data available

PHYSICAL STATE: Solid

pH: No data available

MELTING POINT: 2651°F (1455°C)

BOILING POINT: 5252°F (2900°C)

FREEZING POINT: No data available

FLAMMABILITY: No data Available

FLASH POINT: No data available

AUTO IGNITION TEMPERATURE: No data available

DECOMPOSITION TEMPERATURE: No data available

VAPOR PRESSURE : 1mm Hg at 3290°F (1810°C)

SPECIFIC GRAVITY: 8.9 g/cc

Insoluble in water

SECTION 10: REACTIVITY DATA

REACTIVITY: No data.

CHEMICAL STABILITY: Stable under recommended handling and storage conditions. (see section 7)

POSSIBILITY OF HAZARDOUS REACTIONS: High temperatures will generate toxic cadmium oxide fumes.

CONDITIONS TO AVOID: Avoid creating or accumulating fines or dusts. Avoid high temperatures.

INCOMPATIBLE MATERIALS: Acids, aluminum alloys, ammonia, oxidizers, sulfur

HAZARDOUS DECOMPOSITION PRODUCTS: Will not occur.

SECTION 11: TOXICITY DATA

ROUTES OF ENTRY: Inhalation, ingestion, skin, eyes. Product as shipped does not present an inhalation hazard; however subsequent operations may create dusts or fumes which could be inhaled.

SYMPTOMS (ACUTE): N/A

DELAYED EFFECTS: No data available

ACUTE TOXICITY:

CHEMICAL NAME:	CAS NUMBER	ORAL LD50	DERMAL LD50	INHALATION LC50
Nickel, Metal	7440-02-0	N/A	N/A	N/A

CARCINOGENICITY:

CHEMICAL NAME:	CAS NUMBER	IARC	NTP	OSHA
Nickel, Metal	7440-02-0	Listed	Listed	Listed

CHRONIC EFFECTS: There is evidence of a sensitization effect. Target organ effects: certain forms of this product are considered carcinogens.

SECTION 12: ECOLOGICAL DATA

OVERVIEW: Moderate ecological hazard. This product may be hazardous to plants and/or wildlife. Keep out of waterways.

MOBILITY: N/A

PERSISTANCE: N/A

BIOACCUMULATION: N/A

DEGRADABILITY: N/A

OTHER ADVERSE EFFECTS: N/A

Chemical Name	CAS Number	Eco Toxicity
Nickel, metal	7440-02-0	96 HR LC50 BRACHYDANIO RERIO > 100 MG/L 96 HR LC50 CYPRINUS CARPIO 10.4 MG/L (STATIC) 48 HR EC50 DAPHNIA MAGNA > 100 MG/L 48 HR EC50 DAPHNIA MAGNA > 1 MG/L (STATIC) 72 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 0.18 MG/L

SECTION 13: DISPOSAL INFORMATION

DISPOSAL METHODS: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance

WASTE DISPOSAL CODE(S): Not determined

SECTION 14: TRANSPORT INFORMATION

GROUND- DOT PROPER SHIPPING NAME:

N/A

AIR- IATA PROPER SHIPPING NAME:

Not regulated for air transport by IATA.

SECTION 15: REGULATORY INFORMATION

TSCA STATUS:

All components in this product are on the TSCA Inventory.

CALIFORNIA PROP 65:

WARNING: This product contains a chemical known to the state of

CHEMICAL NAME:	CAS NUMBER	§ 313 NAME	§ 313 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Nickel, Metal	7440-02-0	Nickel	No	100lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of solid metal released is >100 µm);4.54kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal is >100µm)	No	No

California to cause cancer and birth defects or other reproductive harm.

SECTION 16: ADDITIONAL INFORMATION

REVISED: MAY 2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Nathan Trotter & Co. Inc. makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

GLOSSARY:

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service Number

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DOT: U.S. Department of Transportation

IARC: International Agency for Research on Cancer

N/A: Not Available

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

PPM: Parts per million

RCRA: Resource Conservation and Recovery Act

SARA: Superfund Amendments and Reauthorization Act

TLV: Threshold Limit Value

TSCA: Toxic Substances Control Act

IDLH: Immediately dangerous to life and health