



Centre Anti-Poison pour le Québec: (800) 463-5060

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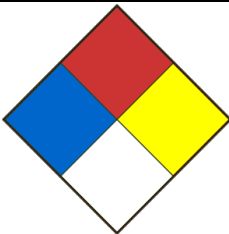
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SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier NICKEL (POWDER)		Product Use Laboratory use	
Chemical formula Ni		Product code NR-0105 ; NR-0106	Molar weight 58,71
Chemical name / Commercial name / Synonymous NICKEL (DUST), NICKEL PARTICULES			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 7/24/2020	SDS Prepared by Laboratoire MAT		E-Mail labmat@labmat.com

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Respiratory or skin sensitization - Skin sensitize category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Carcinogenicity category 1B
Signal Word	DANGER
Hazards statements (H)	H317 May cause an allergic skin reaction. H372 Causes damage to organs through prolonged or repeated exposure. H350 May cause cancer.
Precautionary statements (P)	P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P362 + P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P272 Contaminated work clothing should not be allowed out of the workplace. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P321 Specific treatment (see section 4 of the SDS and on this label). P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P260 Do not breathe dust / fume / gas / mist / vapours / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. P314 Get medical advice/attention if you feel unwell. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P308 + P313 IF exposed or concerned: Get medical advice/attention. P405 Store locked up.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	Health 2 Fire 2 Reactivity 1 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Nickel	7440-02-0	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Fine dust in sufficient concentration may be combustible, or explode if confined to a small space and subject to a source of ignition.
Suitable extinguishing media	Use a Class D fire extinguisher or special powder for metal fires.
Unsuitable extinguishing media	Do not use water.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - Nickel/nickel oxides, Aluminum oxide.
Special fire and explosion hazards	Possibility of violent reactions with titanium, ammonium nitrate, ammonium perchlorate and hydrazoic acid. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Cut off all sources of ignition. Pick up with a broom, taking care not to scatter dust. Dispose of residues in a container provided for the disposal of hazardous materials. When handling, wear appropriate safety equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from moisture and incompatible products. Keep container tightly closed in a dry and well-ventilated place.
Methods of handling	Provide appropriate exhaust ventilation at places where dust or vapor is formed. Always open containers slowly to allow any excess pressure to vent. Avoid ingestion and inhalation. Avoid contact with water. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	No.-CAS	Control parameters	Value	Basis
Nickel	7440-02-0	TWA	1.5mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	0.05mg/m ³	Canada. British Columbia OEL
		TWA	1mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	1mg/m ³	Canada. Ontario OELs

Data source	Fisher Scientific
Ventilation	Fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	Poudre de couleur grise (granulométrie env. 100 mesh).
Odour	Inodore.
Odour threshold	Data not available
pH	Donnée non-disponible.
Melting point / Freezing point	1455-2651 °C
Initial boiling point	2730 °C
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	133 Pa à 1810 °C.
Vapour density	Data not available
Relative density	8.9g/cm ³
Solubility	Insoluble dans l'eau et solvants organique, soluble dans acides forts.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	400 °C
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	May form combustible dust concentrations in the air.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid dust formation.
Incompatible material	Acids, titanium, hydrazoic acid, strong oxidizing agents and sulfides. Heated powdered nickel can react strongly with ammonium nitrate, sulfur, selenium, phosphorus, arsenic, boron, carbon, titanium and silicon.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - nickel/nickel oxide

SECTION 11 - TOXICOLOGICAL INFORMATION

NICKEL (POWDER)

Routes of exposure	Inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and tearing.
- Skin	Irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and the upper respiratory system.
Acute toxicity (Ingestion)	Narcotic effects, gastrointestinal disorders, cramps, diarrhea, headache, dizziness, drowsiness, confusion, tremors, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, cough, breathing problems, laryngitis, conjunctivitis, shortness of breath, headache, nausea and vomiting. May cause skin allergy in some subjects. Is recognized as a possible carcinogen for humans (class 2B) by IARC.
DL50 (specify species and route of entry)	LD50 Oral - Rat - > 9000 mg/kg. LD50 Dermal: Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Toxicity to fish: Semi-static test LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - 15.3 mg/L - 96h.
Persistence and degradability	Insoluble in water. May persist based on information provided.
Bioaccumulative potential	Data not available.
Mobility in soil	Is not likely mobile in soil due its low water solubility.
Other adverse effects	Harmful to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Respiratory or skin sensitization - Skin sensitize category 1 Specific Target Organ Toxicity - Repeated exposure category 1 Carcinogenicity category 1B
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SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 7/24/2020