

MATERIAL SAFETY DATA SHEET**Nickel Powder****Page 1 of 5****1.) Product & Company Identification**

Supplier : Me-Toz Metal Tozları Makina Yedek Parça San.Tic.Ltd.Şti.
Altintepe Mah. İlkbahar Çıkmazı Sk. No.3 K.2 D.3 Maltepe - İstanbul
Emergency Contact : TEL : 0090 216 489 45 40 GSM : 0090 532 282 3749
Manufacturer : Me-Toz Metal Tozları Makina Yedek Parça San.Tic.Ltd.Şti.
Altintepe Mah. İlkbahar Çıkmazı Sk. No.3 K.2 D.3 Maltepe - İstanbul
Product Name : Nickel Powder

2.) Composition / Information on Ingredients

Composition % : Ni %99,5 min
Particle Shape : Irregular
Appearance : Silvery Grey, with variable grade size

3.) Hazards Identification**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Kidney, Blood	

Label Elements**Danger****Hazard statements:**

H351 Suspected of causing cancer by inhalation
H372 Causes damage to organs through prolonged or repeated exposure by inhalation
H317 May cause an allergic skin reaction
H412 Harmful to aquatic life with long lasting effects

Prevention

Obtain special instructions before use.
Do not breathe dust/fume/gas/mist/vapours/spray.
Avoid release to the environment.
Use personal protective equipment as required.
IF exposed or concerned: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention

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- Eye** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.
- Skin** : Wash with plenty of water and soap and rinse thoroughly. Remove contaminated clothing and shoes. Seek immediate medical attention. If skin irritation or rash occurs: Get medical advice/attention.
- Ingestion** : Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
- Inhalation** : Remove person to fresh air. If not breathing, give artificial respiration. Oxygen may be administered if breathing is difficult. Seek immediate medical attention.
- Most important symptoms and effects, both acute and delayed** : skin contact: itching, ekzema

5.) Fire Fighting Measures

- Suitable Extinguishing Media : Use water spray, foam, dry chemical or carbon dioxide.
- Unsuitable Extinguishing Media : N/A
- Specific Hazards Arising from the Chemical : Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. May oxidize to nickel oxide if exposed to high temperatures within a fire. Under special conditions nickel can react with carbon monoxide in reducing atmospheres to form Nickel Carbonyl, Ni(CO)₄, a toxic gas. Metal powders when heated in reducing atmospheres may become pyrophoric.
- Hazardous Combustion Products : Nickel oxide fume, carbon dioxide and carbon monoxide
- Advice for Firefighters : LARGE FIRES: Do not scatter spilled material with high pressure water streams. Self contained breathing apparatus and suitable protective clothing required. Use water spray to keep the fire-exposed container cool.

6.) Accidental Release Measures

- Personal Precautions** : For non-emergency responders Avoid substance contact. Avoid inhalation of dust Provide of sufficient ventilation
For emergency responders For suitable protective equipment refer to Section 8
- Environmental Precautions** : Do not let enter drains, prevent release to the environment..
- Methods for Containment and Clean Up** : Collect spills by wet sweeping or vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter if exhaust is discharged into the work place. Wear appropriate nationally approved respirators if collection and disposal of spills is likely to cause the concentration limits of airborne nickel to exceed the locally prescribed exposure limits. Nickel containing material is normally collected to recover nickel values.

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Handling : Avoid substance contact. Do not breathe dust. Provide appropriate ventilation or local exhaust system if dusts are generated. . Any unavoidable deposit of dust must be regularly removed. Wear appropriate respirator if handling is likely to cause the concentration of airborne nickel.

Storage : Store locked up. Keep container tightly closed and sealed until ready for use. Store away from acids or reactive substances.

8.) Exposure Controls / Personal Protection

Control Parameters : An indicative, inhalable Nickel Occupational exposure Limit of 0.05 mg/m³ for workers is given and justified by the CSR - instead of a DNEL-DMEL in the long term - local and systemic effects - inhalation risk characterisation for Nickel-substances.

Eye/Face Protection : Safety goggles/face shield

Skin Protection : Protective gloves. Chemical resistant protective clothing.

Respiratory Protection : If exposed to dust concentrations above the exposure limit, use appropriate, certified respiration protective equipment. Respiratory Protective equipment (FFP2) {approved with regard to EN 149} is required for unenclosed processes involving powders. Respiratory cartridges or canisters must be changed following the recommendations of the supplier.

Engineering Measures : Provide exhaust ventilation or local exhaustion to keep the airborne concentrations of vapours below their respective threshold limit value.

9.) Physical and Chemical Properties

Appearance : Solid Powder

Particle shape : Irregular

Colour : Silvery Grey

Odour : Odourless

Flammability : Not flammable

Melting Point : 1453 °C

Initial Boiling Point : 2732 °C

Relative Density : 8.9 g/cm³

Solubility : Insoluble in water

Autoignition Temperature : Very fine divided metal can smoulder in the presence of oxygen or air

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Reactivity	: Stable under normal temperatures and pressures. Material does not pose a dust explosion hazard
Chemical Stability	: The product is stable under normal conditions (room temperature)
Hazardous Reactions	: This product can react vigorously with acids to liberate hydrogen, which can form explosive mixtures with air. Under special conditions nickel can react with carbon monoxide in reducing atmospheres to form nickel carbonyl, Ni(CO) ₄ , a toxic gas.
Conditions To Avoid	: Metal powders when heated in reducing atmospheres may become pyrophoric.
Incompatible Materials	: Violent reactions possible with strong acids, strong oxidizing agents, acid anhydrides, In contact with nitrous acids and its salts nitrosamines may be released.
Hazardous Decomposition Products	: Hydrogen

11.) Toxicological Information

Acute toxicity	<i>Value</i>	<i>Unit</i>	<i>Species</i>
LD50 (oral)	9000	mg/kg bw	rat
LD50 (dermal)		N/A	
NOAEC (inhal)	10,2	mg/L air (66 min.)	observed 14 days after exposure
skin corrosion/irritation	: slight irritation		
serious eye damage/irritation	: not classified		
respiratory or skin sensitisation	: sufficient data from human studies: May cause allergic skin reactions		
germ cell mutagenicity	: not classified, test with mammalian cells - negative		
carcinogenicity	: suspected of causing cancer by inhalation		
reproductive toxicity	: not classified as toxic to reproduction		
STOT-single exposure	: not classified		
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure by inhalation		
aspiration hazard	: not classified		
Other information	: Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.		

12.) Ecological Information

short term toxicity	<i>Value (range)</i>	<i>Duration</i>	<i>Species</i>
LC50 - Fish	0.23 to 320 mg/L	96 h	Pimephales promelas - Danio rerio
LC50 - Invertebrates	0.013 to 4970 mg/L.	48 h	Ceriodaphnia dubia - Daphnia magna
IC50 - algae	12,6 - 424 µg/L	72 h	Selenastrum capricornutum (OECD 201)
EC50 (bacteria)	33 mg/L	48 h	activated sludge (STP)
long term toxicity	<i>Value (range)</i>	<i>Duration</i>	<i>Species</i>
Fish - NOEC / L(E)C10	40 - 1379 µg/L	--	Danio rerio - oncorhynchus mykiss
Invertebrates NOEC / L(E)C10	1.4 - 1193.3 µg/L	--	Lymnea stagnalis - chironimus tentans
Algae: NOEC / EC10	12,6 - 425 µg/L	--	Scenedesmus accumulatus – Pseudokirchnerella subcapitata

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Chemicals and packages as waste must be disposed of in accordance with the respective national and local regulations. Containers should be cleaned of residual product before disposal. Consult your local or regional authorities. Do not contaminate ground or surface waters via drainage, by cleaning of equipment or disposal of wastes.

14.) Transport Information

	DOT	TDG	IATA	IMDG/IMO
UN-No	UN3089	UN3089	UN3089	UN3089
Proper Shipping name	Metal Powders, Flammable	Metal Powders, Flammable	Metal Powders, Flammable	Metal Powders, Flammable
Hazard Class	4.1	4.1	4.1	4.1
Packing Group	II	II	II	II

15.) Regulatory Information

Acute Health Hazard	: Yes
Chronic Health Hazard	: Yes
Fire Hazard	: No
Sudden Release of Pressure Hazard	: No
Reactive Hazard	: No

16.) Other Information

No Data Available...

Disclaimer

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