



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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(716) 226-6177

MSDS No. NN 110
Effective Date April 1, 1999

SECTION V HEALTH HAZARD DATA

NN 110

Threshold Limited Value TWA: 1 mg/m³ (ACGIH 1992-93).

Effects of Overexposure May cause dermatitis in sensitive individuals. No acute respiratory reaction or conclusive chronic effects from exposure to nickel metal have been observed, but proper laboratory hygiene requires maintenance of working atmosphere at concentrations below the recommended TLV.

Emergency and First Aid Procedures
EYES: Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **INHALATION:** Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If discomfort or illness develops, get medical attention. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink. Induce vomiting and call physician. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water, then wash with mild soap and water. If irritation develops or persists, get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature and heat, storage near mineral acids.
	Stable	X		

Incompatibility (Materials to Avoid) Slowly attacked by dilute hydrochloric acid or sulfuric acid; readily attacked by nitric acid. Ammonium nitrate, perchlorates, phosphorus, selenium, sulfur.

Hazardous Decomposition Products Heating nickel metal emits nickel dust or fumes. Reacts with mineral acids to liberate hydrogen. Evolved hydrogen may become explosive hazard.

Hazardous Polymerization		Conditions to Avoid	Not applicable.
May Occur	Will Not Occur		
	X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Recover for use if not contaminated. Wearing suitable protective clothing and avoid making dust, sweep up and place in suitable container for proper disposal.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. This material can be safely disposed of in a landfill but this metal may have scrap value on your local market and this should be investigated before disposing of potentially valuable materials.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) None should be needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA approved dust mask.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment Lab coat, apron, proper gloves, ventilation hood, eye wash station.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool, dry place away from acids. Wash thoroughly after handling. Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Do not store near acids or reactive substances. Avoid repeated skin contact. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 2	Date 4/1/99	Approved Michael Raszeja	Chemical Safety Coordinator MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	NICKEL METAL POWDER	 <p>CHEMTREC 800-424-9300 Day 716-226-6177</p> <p>NFPA HAZARD RATING</p> <table border="1"> <tr> <td>LEAST</td> <td>SLIGHT</td> <td>MODERATE</td> <td>HIGH</td> <td>EXTREME</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table> <p>HMIS *</p> <table border="1"> <tr> <td>Health</td> <td>3</td> </tr> <tr> <td>Fire</td> <td>4</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	LEAST	SLIGHT	MODERATE	HIGH	EXTREME	0	1	2	3	4	Health	3	Fire	4	Reactivity	0
LEAST	SLIGHT		MODERATE	HIGH	EXTREME													
0	1		2	3	4													
Health	3																	
Fire	4																	
Reactivity	0																	
Chemical Synonyms	Nickel Metal																	
Formula	Ni																	
Unit Size	up to 2.5 Kg.																	
C.A.S. No.	7440-02-0																	

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Nickel Metal, Powder	100%	See Section V.

WARNING! FLAMMABLE AS DUST! MAY CAUSE SKIN IRRITATION.

HARMFUL AS DUST OR FUME. CANCER SUSPECT AGENT.

SECTION III PHYSICAL DATA

Melting Point (°F)	1452°C (2645°F)	Specific Gravity (H ₂ O = 1)	8.90 at 20°C
Boiling Point (°F)	2732°C (4950°F)	Percent Volatile by Volume (%)	Non-volatile (NA).
Vapor Pressure (mm Hg)	1 mm at 1810°C	Evaporation Rate (=1)	Non-volatile (NA).
Vapor Density (Air=1)	Data not listed.		
Solubility in Water	Insoluble in water.		
Appearance & Odor	Lustrous white, hard, ferromagnetic metal; powder; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Flammable as dust.	Flammable Limits in Air % by Volume	Unknown	Lower	Upper
Extinguisher Media	Dry sand; carbon dioxide (CO ₂); or dry powder.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Reacts with acids to liberate hydrogen gas which can form explosive mixtures in air.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 133)

D.O.T. **FLAMMABLE SOLIDS, INORGANIC, N.O.S., (NICKEL POWDER), 4.1, UN 3178, PG III.**

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20