

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND CONTACT INFORMATION

Product Name: Nickel (Accelerator, Capsules, Plugs, Baskets)

AR 205, AR 508, AR 509, AND-3500, AEB-1007, AEB-1024, AED-6000, AR 568, 569, AR 598, AR 599, AR1951, AR2059, AR2183, AR2190, AR2343, AR2344, AR2345, AR4101, AR4113, AR8599, AR9001

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2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	%W	CHEMICAL NAMES	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)	NIOSH TWA (mg/m3)
7440-02-0	100	Nickel	1	1.5	N/A

3. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation or dermatitis in sensitive individuals with repeated skin exposure.

INHALATION: Possibility of asthma in some individuals to some form of particulates containing Nickel.

INGESTION: Poison by ingestion (low oral toxicity level).

CHRONIC OVEREXPOSURE: Adverse effects may result from long term exposure to welding fume, gases or dusts. Exposures must be kept below the values stipulated.

ACUTE OVEREXPOSURE: see above.

MERDICAL CONDITIONS AGGRAVATED: not available.

CARCINOGENICITY: According to OSHA CFR1910.2000 (d)(4)(i), Nickel metal is considered a possible cancer hazard because the NTP has concluded that it may be reasonable anticipated to be a human carcinogen. IARC (June 1989) has reclassified Nickel metal as a Group 2B carcinogen (possibly carcinogenic to humans). This classification is used where there is in adequate evidence in humans and limited or no evidence in animals.

4. FIRST AID MEASURES

EYES: Flush with large amounts of water. Get medical attention if irritation persists.

INHALATION: Removed from exposure to fresh air immediately. Consult a physician

SKIN: Wash skin with plenty of soap and water. Remove contaminated clothing and wash before reuse.

INGESTION: Induce vomiting if large amount is ingested (only if victim is conscious). Get medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Non-flammable

Flash Point: Not available

Flammable Limits: (% by Volume in Air): Lower: None Upper: None

AUTO-IGNITION TEMPERATURE: N/A

HAZARDOUS COMBUSTION PRODUCTS: N/A.

EXTINGUISHING MEDIA: Dry chemical.

FIREFIGHTING INSTRUCTIONS: Wear approved self-contained breathing apparatus. Massive forms of Nickel do not pose a fire or explosion hazard. Water contact with molten metal may cause an explosion.

6. ACCIDENTAL RELEASE MEASURES

SMALL/LARGE SPILL: If Nickel is spilled, it can be safely swept, shoveled or picked up by hand and returned to the original container. .

7. HANDLING AND STORAGE

HANDLING: Precautions and good ventilation at the workplace should be used if handling or use of metallic Nickel will produce fine dust, fume or mist.

STORAGE: Keep container closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: local ventilation to meet exposure limits.

RESPIRATORY PROTECTION: NIOSH/MSHA respirator for dust or fumes if exposure above the PEL limit.

SKIN AND HAND PROTECTION: Leather or rubber gloves.

EYE AND FACE PROTECTION: Safety glasses with side shields are recommended. If metal is dissolved, avoid solution contact by use of protective goggles.

OTHER PROTECTIVE EQUIPMENT: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: silvery white solid forms, chips or dust

BOILING POINT: 4946 F (2730 C)

FREEZE-MELT POINT: 2647 F (1453 C)

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 8.9

pH: N/A

ODOR: None

PERCENT VOLATILES: N/A

EVAPORATION RATE: N/A

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

INCOMPATIBILITY: Contact with mineral acids will release hydrogen, a flammable and explosive gas. Reacts violently with fluorine, ammonium nitrate, hydrazine, ammonia, performic acid and sulfur. Under specific conditions, exposure to Carbon Monoxide will produce Nickel Carbonyl – a highly toxic gas. Avoid oxidizing agents, interhalogens, halogens, sulfur and ammonia.

HAZARDOUS DECOMPOSITION PRODUCTS: Nickel fumes.
HAZARDOUS POLYMERIZATION: None.

11. TOXICOLOGICAL INFORMATION

The acute and chronic toxicity of this substance is not fully known.

EPA-A: Human Carcinogen: Sufficient evidence from epidemiological studies to support a causal link exposure and cancer.

IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.

NTP-2: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.

ACGIH A5: Not suspected as a human carcinogen: not suspected as a human carcinogen on the basis of properly conducted epidemiological studies in humans. Studies have sufficiently long follow-up, reliable exposure histories, sufficiently high dose, and adequate statistical power to conclude that exposure to the agent does not convey a significant risk of cancer to humans. Evidence suggesting a lack of carcinogenicity in experimental animals will be considered if it is supported by other relevant data.

RTECS: The Registry of Toxic Effects of Chemical Substances contains tumorigenic and/or carcinogenic and/or neoplastic data for components in this product.

12. ECOLOGICAL INFORMATION

Do not allow material to be released to the environment without the proper governmental permits.

13. DISPOSAL CONSIDERATION

Dispose of in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

USA DOT: Not regulated

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA STATUS: On toxic Substance Control Inventory

CERCLA Reportable Quantity: Copper, 5000 lbs

RCRA Status: Not regulated

SARA TITLE III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: Chronic

Section 313 Toxic Chemicals: Copper

CANADIAN REGULATIONS

WHMIS: D2A

16. OTHER INFORMATION

SUPPLEMENTAL INFORMATION

The data and information as stated was furnished by the manufacturer/vendor &/or supplier of this product. Alpha Resources, Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

Date Prepared: September 16, 2013

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