

NICKEL CARBONATE
MATERIAL SAFETY DATA SHEET

MSDS Number: N724
Revision Date: 16-Apr-08
Revision No.: 004

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Product Identification

Product Name: NICKEL CARBONATE
Synonyms: Nickelous carbonate; Nickel (II) carbonate; Carbonic acid, nickel salt
Chemical Formula: NiCO₃
Formula Weight: 118.72
Chemical Family:
Integra Product Numbers: N724.10; N724.50

Hazard Overview

HMIS Rating: 3-0-0-F NFPA Rating: NE
Warning Label:

WARNING

Causes irritation. Harmful if swallowed or inhaled. Use only with adequate ventilation. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Nickel and nickel compounds may cause allergic skin or respiratory reaction. Possible cancer hazard. Handle with due care.

Components

| <u>Component</u> | <u>CAS #</u> | <u>%</u> |
|------------------|--------------|----------|
| Nickel carbonate | 03333-67-3 | 100 |

Physical Data

| | | | |
|------------------------|------------|--------------------------|------------|
| <u>Boiling Point:</u> | NA | <u>Specific Gravity:</u> | NA |
| <u>Melting Point:</u> | decomposes | <u>Evaporation Rate:</u> | NA |
| <u>Vapor Pressure:</u> | NA | <u>Vapor Density:</u> | NA Air = 1 |

Solubility:

Negligible (<0.1%) solubility in water.

Appearance and Odor:

Light green powder.

Fire and Explosion Data

| | | | |
|---|-----------|---------------------|--|
| <u>Flash Point:</u> | NA | <u>Test Method:</u> | |
| <u>Auto-ignition Temperature:</u> | NA | | |
| <u>Flammable Limits (% by volume in air):</u> | Upper: NA | Lower: NA | |

Fire Extinguishing Media:

Material is not flammable. Use extinguishing media suitable to surrounding materials.

Special Firefighting Procedures:

Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Unusual Fire and Explosion Hazards:

None identified

Health Hazard Information

Effects of Overexposure

Skin Contact:

Contact may cause skin irritation. May cause allergic dermatitis. Nickel is a contact allergen and sensitizer.

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INTEGRA Chemical Company
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

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Health Hazard Information

Eye Contact:

Contact may be irritating to the eyes.

Ingestion:

Harmful if swallowed. Ingestion may cause nausea, vomiting and gastrointestinal irritation.

Inhalation:

Harmful if inhaled. Irritating to the upper respiratory tract and mucous membranes.

Chronic Effects of Overexposure:

Prolonged or excessive exposure to dusts may cause chronic pulmonary disorders, skin and respiratory sensitization and allergic reaction. Nickel and certain nickel compounds are considered carcinogenic and noted for producing lung and nasal cancers.

Exposure Limits:

| | <u>TWA</u> | <u>OSHA PEL</u> <u>STEL</u> | <u>Ceiling</u> |
|------------------|-----------------------------|---------------------------------|----------------|
| Nickel carbonate | (as Ni) 1 mg/m ³ | NE | NE |
| | <u>TWA</u> | <u>ACGIH TLV</u> <u>STEL</u> | <u>Ceiling</u> |
| Nickel carbonate | (as Ni) 1 mg/m ³ | NE | NE |

Toxicity Data:

Nickel carbonate No information available.

Medical Conditions Generally Aggravated by Exposure:

Skin and respiratory conditions.

Target Organs:

Respiratory system, lungs, eyes, skin

Reproductive Effects:

None Identified

Carcinogenicity:

Nickel and certain nickel compounds are considered carcinogenic

| <u>Component</u> | <u>NTP Listing</u> | <u>IARC Listing</u> | <u>OSHA Regulated</u> |
|------------------|------------------------------|---------------------|--------------------------|
| Nickel carbonate | Group 2, Possible Carcinogen | No Listing | <input type="checkbox"/> |

Emergency First Aid Procedures

Skin Contact:

Immediately remove contaminated clothing. Flush skin with water for at least 15 minutes. Seek immediate medical attention.

Eye Contact:

Flush with water for at least 15 minutes. Seek immediate medical attention.

Inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult administer oxygen. Seek medical attention.

Ingestion:

Give victim large amounts of water and induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

Additional First aid and Treatment Notes:

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Emergency First Aid Procedures

No information available

Reactivity Data

Stability: Stable

Hazardous Polymerization: Will Not Occur

Incompatibles:

For nickel: aluminum, aluminum trichloride, ethylene, p-dioxan, hydrogen, methanol, non-metals, oxidants, sulfur compounds, mineral acids.

Decomposition Products:

CO₂. Nickel oxides and nickel carbonyl may also be released.

Conditions to Avoid:

Contamination.

Spill and Disposal Procedures

Spill and Leak Procedures:

Prevent spread of spill. Sweep or scoop into disposal container. Flush residues with water. Wear suitable protective equipment. Vacuuming or wet sweeping may be used to avoid dust dispersion.

Disposal Procedures:

Dispose in accordance with all Local, State and Federal regulations.

Protective Equipment

Ventilation:

Use general or local exhaust ventilation to meet TLV and PEL requirements.

Respiratory Protection:

None required where adequate ventilation conditions exist. If airborne concentration exceeds PEL or TLV a dust/mist respirator is recommended.

Skin and Eye Protective Equipment:

Safety goggles, protective clothing and gloves. Maintain an eyewash station and safety shower nearby.

Storage and Handling Precautions

Storage Area: HEALTH HAZARD

Store in a cool, dry well-ventilated area or cabinet dedicated to toxic storage. Isolate away from incompatible materials. Keep containers well closed.

Transportation Information

Regulated Material domestic ground transportation

(reference: CFR Title 49, Transportation)

Proper Shipping Name:

UN or NA Identification number:

Packing Group:

Hazard Class and Label:

Subsidiary Risk and Label:

Regulated Material via Air Transportation

(reference: ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air)

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Transportation Information

Proper Shipping Name: _____
UN Identification Number: _____ Hazard Class and Label: _____
Packing Group: _____ Subsidiary Risk and Label: _____
Packing Instruction _____ Max net qty per package _____
Passenger Aircraft: _____
Cargo Aircraft: _____

Regulatory Information

| <u>Component</u> | <u>TSCA</u> <u>Inventory</u> | <u>CERCLA</u> <u>RQ</u> | <u>SARA EHS</u> <u>TPQ</u> | <u>SARA 313 Toxic Release</u> <u>de minimus</u> |
|----------------------------------|-------------------------------------|-------------------------------------|-------------------------------|--|
| Nickel carbonate | <input checked="" type="checkbox"/> | lbs | <input type="checkbox"/> | lbs |
| <u>SARA Hazard Categories:</u> | <u>Acute</u> | <u>Chronic</u> | <u>Flammability</u> | <u>Pressure</u> |
| Nickel carbonate | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <u>Clean Air Act Categories:</u> | <u>SOCMI</u> | <u>HAP</u> | <u>Volatile HAP</u> | <u>Organic HAP</u> |
| Nickel carbonate | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

MSDS Revision History:

002 - Changed header phone number
003 - Format revisions; updated header phone number
004 - Updated Header Information

NE = Not established, NA = Not applicable or Not available

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***** END OF MSDS *****