Section 1 - Product and Company Information

Product Name: NICKEL CARBONATE, BASIC HYDRATE
Product Number: 544183
Brand: ALDRICH

Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS MO 63103 US
Technical Phone: 314 771 5765
Emergency Phone: 414 273 3850 Ext. 5996
Fax: 800 325 5052

Section 2 - Composition/Information on Ingredient

Substance Name: NICKEL CARBONATE BASIC HYDRATE
CAS #: 39380-74-0
SARA 313: Yes

Formula: NiCO3.2Ni(OH)2.xH2O
Synonyms: Basic nickel(II) carbonate * Carbonic acid, nickel salt, basic * Nickel carbonate hydroxide (2Ni(OH)2.Ni(CO3))
RTECS Number: QR6250000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Harmful. Dangerous for the environment.
Harmful if swallowed. Limited evidence of a carcinogenic effect.
May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Possible Carcinogen (US). Target organ(s): Skin. Lungs.

HMIS RATING
HEALTH: 3*
FLAMMABILITY: 0
REACTIVITY: 0

NFPA RATING
HEALTH: 3
FLAMMABILITY: 0
REACTIVITY: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician.
INHALATION EXPOSURE
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

DERMAL EXPOSURE
In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT
N/A

AUTOIGNITION TEMP
N/A

FLAMMABILITY
N/A

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

METHODS FOR CLEANING UP
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE
Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Use only in a chemical fume hood. Safety shower and eye bath.
PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Government approved respirator in nonventilated areas
and/or for exposure above the TLV or PEL.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash contaminated clothing before reuse. Wash thoroughly after
handling.

Section 9 - Physical/Chemical Properties

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<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
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<td>Molecular Weight</td>
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<td>pH</td>
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<td>MP/MP Range</td>
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<td>Solubility</td>
<td>Solubility in Water: Slightly. Soluble.</td>
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</table>

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Strong oxidizing agents, Strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,
Nickel/nickel oxides.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur
Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: Harmful if swallowed.

SENSITIZATION
Skin: May cause allergic skin reaction.

TARGET ORGAN(S) OR SYSTEM(S)

SIGNS AND SYMPTOMS OF EXPOSURE
Exposure can cause: Gastrointestinal disturbances. Lung irritation. Dermatitis. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA
Oral
Rat
1,300 mg/kg
LD50

CHRONIC EXPOSURE - CARCINOGEN
Result: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s
IATA UN Number: 3077
Hazard Class: 9
Packing Group: III

Section 15 - Regulatory Information
EU ADDITIONAL CLASSIFICATION
Symbol of Danger: Xn N
Indication of Danger: Harmful. Dangerous for the environment.
R: 22 40 43 50/53
Risk Statements: Harmful if swallowed. Limited evidence of a
carcinogenic effect. May cause sensitization by skin contact.
Very toxic to aquatic organisms, may cause long-term adverse
effects in the aquatic environment.
S: 22 36/37 60 61
Safety Statements: Do not breathe dust. Wear suitable protective
clothing and gloves. This material and its container must be
disposed of as hazardous waste. Avoid release to the
environment. Refer to special instructions/safety data sheets.

US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Harmful. Dangerous for the environment.
Risk Statements: Harmful if swallowed. Limited evidence of a
carcinogenic effect. May cause sensitization by skin contact.
Very toxic to aquatic organisms, may cause long-term adverse
effects in the aquatic environment.
Safety Statements: Do not breathe dust. Wear suitable protective
clothing and gloves. This material and its container must be
disposed of as hazardous waste. Avoid release to the
environment. Refer to special instructions/safety data sheets.
US Statements: Possible Carcinogen (US). Target organ(s): Skin.
Lungs.

UNITED STATES REGULATORY INFORMATION
SARA LISTED: Yes
DEMINIMIS: 0.1 %
NOTES: This product is subject to SARA section 313 reporting
requirements - nickel compounds.
TSCA INVENTORY ITEM: Yes

CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in
accordance with the hazard criteria of the CPR, and the MSDS
contains all the information required by the CPR.
DSL: No
NDSL: No

Section 16 - Other Information

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

WARRANTY
The above information is believed to be correct but does not
purport to be all inclusive and shall be used only as a guide. 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. It does not represent any
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