1. Identification

Product Name: Nickel (II) Carbonate
Cat No.: N51-100; N51-500
CAS-No: 3333-67-3
Synonyms: Carbonic Acid Nickel Salt.
Recommended Use: Laboratory chemicals.
Uses advised against: Not for food, drug, pesticide or biocidal product use

2. Hazard(s) identification

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

- Acute oral toxicity: Category 4
- Acute Inhalation Toxicity - Dusts and Mists: Category 4
- Skin Corrosion/irritation: Category 2
- Serious Eye Damage/Eye Irritation: Category 2
- Respiratory Sensitization: Category 1
- Skin Sensitization: Category 1
- Germ Cell Mutagenicity: Category 2
- Carcinogenicity: Category 1A
- Reproductive Toxicity: Category 1B
- Specific target organ toxicity - (repeated exposure): Category 1

Label Elements

Signal Word: Danger

Hazard Statements:
- Harmful if swallowed
- Harmful if inhaled
- Causes skin irritation
- Causes serious eye irritation
- May cause an allergic skin reaction
Nickel (II) Carbonate

Revision Date 18-Jan-2018

May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing genetic defects
May cause cancer by inhalation
May damage fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure

Precautionary Statements

Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Response
IF exposed or concerned: Get medical attention/advice

Inhalation
IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Skin
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Storage
Store locked up

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Very toxic to aquatic life with long lasting effects
WARNING. Cancer - https://www.p65warnings.ca.gov/

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>3333-67-3</td>
<td>100</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Most important symptoms and effects:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

**Notes to Physician:** Treat symptomatically.

---

### 5. Fire-fighting measures

<table>
<thead>
<tr>
<th>Unsuitable Extinguishing Media</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point Method</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Sensitivity to Mechanical Impact</td>
<td>No information available</td>
</tr>
<tr>
<td>Sensitivity to Static Discharge</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
None under normal use conditions

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

---

### 6. Accidental release measures

**Personal Precautions**
Use personal protective equipment. Ensure adequate ventilation.

**Environmental Precautions**
See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up**
Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

---

### 7. Handling and storage

**Handling**
Do not breathe dust. Do not taste or swallow. Do not get in eyes, on skin, or on clothing. Wash hands before breaks and immediately after handling the product. Avoid dust formation.

**Storage**
Keep containers tightly closed in a dry, cool and well-ventilated place.

---

### 8. Exposure controls / personal protection
Nickel (II) Carbonate

Revision Date 18-Jan-2018

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>Mexico OEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>TWA: 0.2 mg/m³</td>
<td>(Vacated) TWA: 1 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
<td>TWA: 0.015 mg/m³</td>
</tr>
</tbody>
</table>

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light green</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid,gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.6</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Partition coefficient; n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
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</tr>
<tr>
<td>Decomposition Temperature</td>
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</tr>
<tr>
<td>Viscosity</td>
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</tr>
<tr>
<td>Molecular Formula</td>
<td>NiCO3</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>118.6882</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactive Hazard
None known, based on information available
Nickel (II) Carbonate

Stability
Stable under normal conditions.

Conditions to Avoid
Incompatible products. Avoid dust formation.

Incompatible Materials
Strong oxidizing agents

Hazardous Decomposition Products
None under normal use conditions

Hazardous Polymerization
Hazardous polymerization does not occur.

Hazardous Reactions
None under normal processing.

11. Toxicological information

Acute Toxicity

Component Information

Toxicologically Synergistic Products
No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation
Irritating to eyes, respiratory system and skin

Sensitization
May cause sensitization by inhalation May cause sensitization by skin contact

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>3333-67-3</td>
<td>Group 1</td>
<td>Known</td>
<td>A1</td>
<td>X</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Mutagenic Effects
Mutagenic Category 2 May cause heritable genetic damage

Reproductive Effects
Category 1B. Suspect reproductive hazard - contains material which may injure unborn child.

Developmental Effects
No information available.

Teratogenicity
No information available.

STOT - single exposure
None known

STOT - repeated exposure
None known

Aspiration hazard
No information available

Symptoms / effects, both acute and delayed
Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information
No information available

Other Adverse Effects
The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity
Do not empty into drains.

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>Not listed</td>
<td>LC50: = 306.9 mg/L, 96h (Channa argus)</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Persistence and Degradability
No information available

Bioaccumulation/ Accumulation
No information available.
13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>IATA</th>
<th>IMDG/IMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>

15. Regulatory information

<table>
<thead>
<tr>
<th>International Inventories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component</strong></td>
</tr>
<tr>
<td>Nickel carbonate</td>
</tr>
</tbody>
</table>

Legend:
- X - Listed
- E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - Indicates a commenced PMN substance
- R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>3333-67-3</td>
<td>100</td>
<td>0.1</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

See section 2 for more information

<table>
<thead>
<tr>
<th>CWA (Clean Water Act)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component</strong></td>
</tr>
<tr>
<td>Nickel carbonate</td>
</tr>
</tbody>
</table>

Clean Air Act

<table>
<thead>
<tr>
<th>Component</th>
<th>HAPS Data</th>
<th>Class 1 Ozone Depleters</th>
<th>Class 2 Ozone Depleters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

OSHA Occupational Safety and Health Administration

Not applicable

CERCLA

Not applicable
California Proposition 65

This product does not contain any Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>California Prop. 65</th>
<th>Prop 65 NSRL</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>3333-67-3</td>
<td>Carcinogen</td>
<td>-</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Component</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel carbonate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade
No information available

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Revision Date
18-Jan-2018
Print Date
18-Jan-2018
Revision Summary
This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS