

SAFETY DATA SHEET

Preparation Date: 1/24/2018

Revision Date: 1/24/2018

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: N1045
Product Name: NICKEL CARBONATE BASIC, POWDER, REAGENT

Other means of identification

Synonyms: Basic nickel carbonate tetrahydrate
 Nickel carbonate hydroxide tetrahydrate
CAS #: 39430-27-8
RTECS # QR6260000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: In ceramic glazes and enamels. Catalyst. Used in nickel plating.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300

Contact Person: Martin LaBenz (West Coast)

Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Danger

Hazard statements

Harmful if swallowed
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer
May damage fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

Not available

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
Use only outdoors or in a well-ventilated area
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

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.
IF ON SKIN: Wash with plenty of water
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Nickel Carbonate Basic	39430-27-8	100

4. FIRST AID MEASURES

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First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.
- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- Causes skin irritation
 - Moderately irritating to the skin
 - Causes serious eye irritation
 - Moderately irritating to the eyes
 - May cause allergic respiratory reaction
 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
 - May cause an allergic skin reaction
 - May cause allergic contact dermatitis
 - "Nickel itch", dermatitis, sensitization to nickel
 - May cause nausea and vomiting
 - Abdominal pain
 - May cause metallic taste
 - Coughing and wheezing
 - Sore throat
 - Dyspnea (Difficulty breathing and shortness of breath)
 - Weakness
 - Somnolence
 - Blurred vision

Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.
- Unsuitable Extinguishing Media:** No information available.

Specific hazards arising from the chemical

- Hazardous Combustion Products:** If it is involved in a fire the following can be released:
Nickel oxides.

Specific hazards: No information available.

Special Protective Actions for Firefighters

Specific Methods: No information available.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Wear personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Avoid dust formation.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:
Strong oxidizing agents
Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Nickel Carbonate Basic	39430-27-8	1 mg/m ³ TWA (as Ni) (nickel insoluble compounds)	0.015 mg/m ³ TWA (as Ni except Nickel carbonyl) (nickel compounds)	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Nickel Carbonate Basic	39430-27-8	0.2 mg/m ³ TWA (as Ni) (nickel insoluble compounds)	None	0.2 mg/m ³ TWA (as Ni) (nickel insoluble compounds)	1.0 mg/m ³ TWAEV (as Ni) (nickel insoluble compounds)

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Nickel Carbonate Basic	39430-27-8	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles or Safety glasses with side-shields
- Skin and body protection:** Chemical resistant apron
Long sleeved clothing
Gloves
- Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Solid

Appearance:
Powder.

Color:
Light green.

Odor:
Odorless.

Taste
No information available.

Formula:
NiCO₃.2Ni(OH)2.4H₂O

Molecular/Formula weight:
376.24 g/mol

Flammability:
No information available

Flashpoint (°C/°F):
No information available.

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Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): No information available	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): No information available	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: No information available	pH: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Insoluble in water Soluble in ammonia Soluble in dilute acids with effervescence	

10. STABILITY AND REACTIVITY

Reactivity

No information available

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Excess Heat. Incompatible materials. Avoid dust formation.

Incompatible Materials: Strong oxidizing agents
Strong acids

Hazardous decomposition products: Nickel oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

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Component Information

Nickel Carbonate Basic	
CAS-No.	39430-27-8

LD50/oral/rat = 840 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 840 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation. Moderately irritating to the skin. Some individuals may become sensitized and suffer "nickel itch", a form of dermatitis resulting from sensitization to nickel. It is characterized by skin eruptions followed by discrete ulcers, or by eczema.

Eye Contact: Causes serious eye irritation. Moderately irritating to the eyes.

Inhalation Harmful by inhalation. May cause irritation of respiratory tract. Symptoms may include coughing, wheezing, sore throat, hoarseness, shortness of breath (dyspnea), asthma, bronchitis, metallic taste in mouth. Other symptoms of inhalation of nickel or nickel compounds may include nausea, vomiting, abdominal pain, giddiness, dizziness, weakness, somnolence, sleeplessness, dysphoria, blurred vision, and numbness.

Ingestion Harmful if swallowed.

Aspiration hazard No information available.

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

Chronic Toxicity Skin: Sensitizer. May cause allergic skin reaction (allergic contact dermatitis).
Inhalation: May cause allergic respiratory reaction (occupational asthma).
Prolonged or repeated inhalation may cause respiratory sensitization.

Sensitization: May cause sensitization by inhalation and skin contact.

Mutagenic Effects: Sister Chromatid Exchange: Hamster ovary (RTECS)
DNA Damage - human lymphocyte

Carcinogenic effects: May cause cancer.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Nickel Carbonate Basic	39430-27-8	Group 1- Carcinogenic to Humans - Monograph 100C[2012]; Monograph 49[1990](evaluated as a group) (for Nickel compounds)	Not listed	Not listed	Present (as Nickel compounds)	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity May damage fertility or the unborn child

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Target Organs: Skin. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Nickel Carbonate Basic	39430-27-8	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class No information available
Packing group: No information available
Emergency Response Guide Number No information available
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No Information available
Description: No information available

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available

Subsidiary Risk: No information available
Packing Group: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
ERG Code: No information available
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Nickel Carbonate Basic	39430-27-8	Not Listed	Not present	Not present	Present (1)-167	Present[20837]	Present	Not present


U.S. Regulations

Nickel Carbonate Basic

- New Jersey RTK Hazardous Substance List:** sn 2366
- New Jersey (EHS) List:** SN 2366 500 lb TPQ (as Nickel compounds)
- New Jersey - Discharge Prevention - List of Hazardous Substances:** Present (as Nickel compounds)
- Pennsylvania RTK:** Environmental Hazard (as Nickel compounds)
- Pennsylvania RTK - Environmental Hazard List** Present
- Minnesota - Hazardous Substance List:** Present (Carcinogen as Ni)(for nickel insoluble compounds)
- California Directors List of Hazardous Substances:** Present (as Nickel compounds)

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

 **WARNING:** This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Nickel Carbonate Basic	39430-27-8	Carcinogen (listed as Nickel compounds)	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable	Section 302 Extremely Hazardous Substances	Section 302 Extremely Hazardous Substances and	Section 313 - Chemical Category	Section 313 - Reporting de minimis

		Quantities	and TPQs	RQs		
Nickel Carbonate Basic	39430-27-8	None	None	None	Nickel compounds	0.1%

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Nickel Carbonate Basic	39430-27-8	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

D2A Very toxic materials

D2B Toxic materials

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Nickel Carbonate Basic	39430-27-8	Not Listed	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Nickel Carbonate Basic	39430-27-8	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Nickel Carbonate Basic	39430-27-8	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Nickel Carbonate Basic	39430-27-8	No information

EU - CLP (1272/2008)

R-phrase(s)

R22 - Harmful if swallowed.

R42/43 - May cause sensitization by inhalation and skin contact.

S -phrase(s)

S46 - If swallowed, seek medical advice immediately and show this container or label.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37 - Wear suitable gloves.

Components	CAS-No.	Classification	Concentration	Safety Phrases

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			Limits:	
Nickel Carbonate Basic	39430-27-8		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful.

Xn



16. OTHER INFORMATION

Preparation Date: 1/24/2018
Revision Date: 1/24/2018
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet