

# Safety Data Sheet

## Nickel (II) Nitrate, 6-Hydrate

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Nickel (II) Nitrate, 6-Hydrate  
**Recommended Use:** Science education applications  
**Synonyms:** Nickel (II)nitrate, hexahydrate (126); nickelous  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



May intensify fire; oxidizer. Harmful if swallowed or if inhaled. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

#### GHS Classification:

Serious Eye Damage/Eye Irritation Category 1, Respiratory Sensitisation Category 1, Skin Sensitisation Category 1, Carcinogenicity Category 1A, Reproductive Toxicity Category 1B, Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1, Hazardous to the aquatic environment - Acute Category 1, Hazardous to the aquatic environment - Chronic Category 1, Skin Corrosion/Irritation Category 2, Oxidizing Solid Category 3, Acute Toxicity - Inhalation Dust / Mist Category 4, Acute Toxicity - Oral Category 4

**Other Safety Precautions:** IF exposed or concerned: Get medical advice/attention.

**Acute Toxicity Dermal Contains** 100 % of the mixture consists of ingredient(s) of unknown toxicity

**Acute Toxicity Inhalation Gas** 100 % of the mixture consists of ingredient(s) of unknown toxicity

**Contains**

**Acute Toxicity Inhalation Vapor** 100 % of the mixture consists of ingredient(s) of unknown toxicity

**Contains**

### Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u>           | <u>CAS #</u> | <u>%</u> |
|--------------------------------|--------------|----------|
| Nickel (II) Nitrate, 6-Hydrate | 13478-00-7   | 100      |

### Section 4 First Aid Measures

#### Emergency and First Aid Procedures

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

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

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

## Section 5 Firefighting Procedures

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.

**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.

**Hazardous Combustion Products:** Metal Oxides,

## Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away. Avoid prolonged or repeated contact with material. Avoid breathing material. Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Reduce airborne dust and prevent scattering by moistening with water Vacuum or sweep up material and place in a disposal container Avoid runoff into storm sewers and ditches that lead to waterways. Contain the discharged material. Collect spillage.

## Section 7 Handling and Storage

**Handling:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep/Store away from clothing/.../combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection. Do not breathe dust. Avoid contact with skin and eyes. Keep away from ... (incompatible materials to be indicated by the manufacturer).

**Storage:** Store locked up. Keep in a cool, well-ventilated place away from ... (incompatible materials to be indicated by the manufacturer).

**Storage Code:** Blue - Toxic. Store separately in a secured area.

## Section 8 Protection Information

| <b>Chemical Name</b>           | <b>ACGIH</b>   |               | <b>OSHA PEL</b>                 |               |
|--------------------------------|--|---------------|---------------------------------|---------------|
|                                | <b>(TWA)</b>   | <b>(STEL)</b> | <b>(TWA)</b>                    | <b>(STEL)</b> |
| Nickel (II) Nitrate, 6-Hydrate | 0.1 mg/m <sup>3</sup> TWA<br>(inhalable fraction, as Ni) | N/A           | 1 mg/m <sup>3</sup> TWA (as Ni) | N/A           |

### Control Parameters

**Engineering Measures:** Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use. Wear a NIOSH approved respirator if levels above the exposure limits are possible.

**Respirator Type(s):** NIOSH approved air purifying respirator with dust/mist filter.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

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**Skin Protection:**

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:**

Nitrile

## Section 9

## Physical Data

**Formula:** Ni(NO<sub>3</sub>)<sub>2</sub> • 6H<sub>2</sub>O

**Molecular Weight:** 290.82 g/mol

**Appearance:** Green Crystalline Solid

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** 57 C

**Boiling Point:** 136 C

**Flash Point:** No data available

**Flammable Limits in Air:** N/A

**Vapor Pressure:** N/A

**Evaporation Rate (BuAc=1):** N/A

**Vapor Density (Air=1):** N/A

**Specific Gravity:** 2.05

**Solubility in Water:** Soluble

**Log Pow (calculated):** No data available

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Percent Volatile by Volume:** N/A

## Section 10

## Reactivity Data

**Reactivity:**

No data available

**Chemical Stability:**

Stable under normal conditions.

**Conditions to Avoid:**

None known.

**Incompatible Materials:**

Acids, Metals (powdered), Strong reducing agents, Organic Compounds

**Hazardous Decomposition Products:**

Metal Oxides,

**Hazardous Polymerization:**

Will not occur

## Section 11

## Toxicity Data

**Routes of Entry**

Inhalation and ingestion.

**Symptoms (Acute):**

Respiratory disorders, , Eye disorders

**Delayed Effects:**

No data available

**Acute Toxicity:**

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**CAS Number**

13478-00-7

**Oral LD50**

Oral LD50 Rat  
1620 mg/kg

**Dermal LD50**

Not determined

**Inhalation LC50**

Not determined

**Carcinogenicity:**

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**IARC**

Listed

**NTP**

Listed

**OSHA**

Listed

**Chronic Effects:**

**Mutagenicity:**

No evidence of a mutagenic effect.

**Teratogenicity:**

Evidence of a teratogenic effect (birth defect).

**Sensitization:**

Evidence of a sensitization effect.

**Reproductive:**

Evidence of negative reproductive effects.

**Target Organ Effects:**

**Acute:**

See Section 2

**Chronic:**

N/A

## Section 12

## Ecological Data

**Overview:**

Severe ecological hazard. This product may be toxic to plants and/or wildlife. Keep out of waterways.

**Mobility:**

No data

**Persistence:**

No data

**Bioaccumulation:**

No data

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**Degradability:** No data  
**Other Adverse Effects:** No data

**Chemical Name** N/A      **CAS Number** 13478-00-7      **Eco Toxicity**

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** UN2725, Nickel Nitrate, 5.1, III  
**Air - IATA Proper Shipping Name:** UN number: 2725 Class: 5.1 Packing group: III Proper shipping name: Nickel nitrate

## Section 15 Regulatory Information

**TSCA Status:** A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only.

| Chemical Name     | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|-------------------|------------|------------|----------|-----------|-----------|---------------|
| No data available | 13478-00-7 | No         | No       | No        | No        | No            |

**California Prop 65:** WARNING: This product contains a chemical known to the state of California to cause cancer.

## Section 16 Additional Information

**Revised:** 09/09/2015

**Replaces:** 09/03/2014

**Printed:** 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

|        |   |      |   |
|--------|---|------|---|
| ACGIH  | American Conference of Governmental Industrial Hygienists             | NTP  | National Toxicology Program                   |
| CAS    | Chemical Abstract Service Number                                      | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL  | Permissible Exposure Limit                    |
| DOT    | U.S. Department of Transportation                                     | ppm  | Parts per million                             |
| IARC   | International Agency for Research on Cancer                           | RCRA | Resource Conservation and Recovery Act        |
| N/A    | Not Available   | SARA | Superfund Amendments and Reauthorization Act  |
|        |   | TLV  | Threshold Limit Value                         |
|        |   | TSCA | Toxic Substances Control Act                  |
|        |   | IDLH | Immediately dangerous to life and health      |