**MATERIAL SAFETY DATA SHEET**

Nickel (II) Nitrate Hexahydrate

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**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MSDS Name:** Nickel (II) Nitrate Hexahydrate
**Catalog Numbers:** 880105, 880105-1, N02 500, N02-500, N02500, 880105I
**Synonyms:** Nickelous Nitrate Hexahydrate; Nitric Acid Nickel (II) Salt; Nitrate Hexahydrate.

**Company Identification:** Fisher Scientific
1 Naagant Lane
Fairfield, NJ 07004

**For information, call:** 201-796-7100
**Emergency Number:** 201-796-7100
**For additional assistance, call:** 800-224-9300

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**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

**Chemical Name:** Nickelous Nitrate Hexahydrate
**CAS:** 13478-00-7
**Other Names:** Nickelous Nitrate Hexahydrate
**Hazard:** 0
carcinogen: YES
Risk Phrase: 22/28

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**SECTION 3 - HAZARD IDENTIFICATION**

**Emergency Overview:**
Appearance: green emerald
Warning: May cause allergic skin reaction. Oxidizer. May be harmful if swallowed. May cause lung damage. May cause liver and kidney damage. Causes eyes and skin irritation. Causes digestive and respiratory tract irritation. May cause sensitization in humans. Target Organs: Kidneys, liver, respiratory system.

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**Potential Health Effects:**

**Eye:** May cause eye irritation. May cause conjunctivitis.

**Skin:**
- May cause skin irritation. May cause severe irritation and possible sensitization. May cause dermatitis.
- May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver and kidney damage.

**Inhalation:**
- May cause respiratory tract irritation. Inhalation of Vapor may cause respiratory tract irritation. May cause methemoglobinemia, cyanosis, convulsions, encephalopathy, cyanosis, and death.

**Chronic:**
- Prolonged inhalation may cause respiratory tract irritation and lung damage. Prolonged or repeated skin contact may cause sensitization. Carcinogenic and possible development of and/or ulceration. May cause respiratory tract cancer.

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**SECTION 4 - FIRST AID MEASURES**

**Eye:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:**
Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Inhalation:**
If victim is unconscious and alert, give 2-4 cups of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Ingestion:**
Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**
- Treat symptomatically and

**SECTION 5 - FIRE FIGHTING MEASURES**

**General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved or equivalent positive pressure breathing apparatus. During a fire, irritant gases such as oxides of nitrogen may be generated by thermal decomposition. Use water spray to keep fire-exposed containers cool. Substance is nonflammable. Oxidizer. Greatly increases the burning rate of any flammable liquids in the vicinity.

**Extinguishing Media:**
Use water spray to cool fire-exposed containers. Substance is noncombustible. Use agents most appropriate to extinguish surrounding fire. For large fires, fire with water from a distance. DO NOT use dry chemicals, CO2, Halon or foams.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Wear a self-contained breathing apparatus and appropriate Personal Protection. (See Exposure Controls/Personal Protective Equipment section). Avoid generating dusty conditions. Remove all sources of ignition. Carefully scoop up and place into appropriate disposal containers. Provide ventilation.

**SECTION 7 - HANDLING AND STORAGE**

**Handling:**
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Wash clothing before reuse.

**Storage:**
Do not store near combustible materials. Store in a tightly closed container, store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from reducing agents.

**SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

**Engineering Controls:**
Use adequate ventilation to keep airborne concentrations low.

**Chemical Name:** Nickelous Nitrate Hexahydrate
**OSHA/NIOSH Classification:**

**NIOSH/OSHA TWA (listed under ** no name **) 1.5 mg/m3**
**NIOSH/MHHS GEL**
**NIOSH/MHHS GEL**

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**Personal Protective Equipment**

**Eyes:**
Wear appropriate protective eyewear or chemical safety goggles as described by I.A.A. FOGS glasses and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:**
Wear appropriate protective gloves to prevent skin exposure.

**Respirators:**
Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 136 approved respirator when necessary.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Solid
**Color:** Green
**比重:** 4.0 (aqueous sol.)
**Vapor Pressure:** Negligible
None of the chemicals in this product are under a Chemical Test Rule. Section 12b.
None of the chemicals are listed under TSCA Section 12b.

**SECTION 10 - STABILITY AND REACTIVITY***

Chemical Stability:
Stable under normal temperatures and pressures.

**SECTION 11 - TOXICOLOGICAL INFORMATION***

NRCC:
CAS# 13478-00-7, QRT300000
LD50/LC50:
CAS# 13478-00-7: Oral, rat: LD50 = 1620 mg/kg.

Carcinogenicity:
NICKEL(II) NITRATE, HEXAHYDRATE - Not Suspected as a Human Carcinogen (listed as "undetermined").

California: carcinogen, Initial date: 10/1/80 (listed as "undetermined").

H.R. 801: Suspect carcinogen (listed as "undetermined").

OSHA: Possible select sensitizer (listed as "undetermined").

ARC: Group 2B carcinogen (listed as "undetermined").

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive Effects:
No information available.

Neurotoxicity:
No information available.

Mutagenicity:
No information available.

Other Studies:
None.

**SECTION 12 - ECOLOGICAL INFORMATION***

Other:
No information available.

**SECTION 13 - DISPOSAL CONSIDERATIONS***

Dispose of in a manner consistent with federal, state, and local regulations. RCRA P-Series: None listed. RCRA U-Series: None listed.

**SECTION 14 - TRANSPORT INFORMATION***

US DOT:
Shipping Name: NICKEL NITRATE
Hazard Class: 5.1
UN Number: UN2725

Packaging Group: III

Canadian TDG:
Shipping Name: NICKEL NITRATE
Hazard Class: 5.1
UN Number: UN2725

**SECTION 15 - REGULATORY INFORMATION***

US FEDERAL:
CAS# 13478-00-7 is not on the TSCA Inventory. It is a hydrate and exempt from RCRA Inventory. Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List. Chemical Test Rules: None of the chemicals in this material are a SNUR under TSCA.
**SECTION 16 - ADDITIONAL INFORMATION**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if the company has been advised of the possibility of such damages.