SAFETY DATA SHEET

Preparation Date: 5/9/2017 **Revision Date:** 5/9/2017 **Revision Number:** G1

1. IDENTIFICATION

Product identifier

Product code: N1051
Product Name: NICKEL CHLORIDE, CRYSTAL, PURIFIED

Other means of identification
Synonyms: Nicekl (II) chloride hexahydrate
Nickel dichloride hexahydrate
CAS #: 7791-20-0
RTECS # QR6480000
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: Electroplating agent. In organic synthesis. In manufacture of semiconductor devices. Manufacture of substances. Laboratory chemicals.
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 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
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

Danger

Hazard statements
Toxic if swallowed
Toxic if inhaled
Causes skin irritation
Causes eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of causing genetic defects
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
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
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Wear respiratory protection

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: Immediately call a POISON CENTER or doctor/physician
Rinse mouth

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Nickel Chloride, hexahydrate	7791-20-0	100

4. FIRST AID MEASURES

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: Toxic by inhalation. Move to fresh air. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

Ingestion: Toxic if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms Causes skin irritation. Causes eye irritation. May cause cancer. May cause heritable genetic damage in humans. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic contact dermatitis. "Nickel itch", dermititis, sensitization to nickel. May cause metallic taste. May cause irritation of respiratory tract. May cause coughing and shortness of breath. May cause inflammation of the lungs (pneumonitis). Abdominal discomfort, nausea, vomiting, cramping. May cause hypermotility, diarrhea. May cause irritiation to mucous membranes. May cause hyperglycemia. May affect behavior/central nervous system. It may affect metabolism. Weight loss/gain. Paresthesia (numbness and tingling of the extremities). Causes damage to organs through prolonged or repeated exposure. Chronic exposure may affect liver, kidneys/urinary system, and blood. It may affect the brain. May affect the gastrointestinal system.

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. Hydrogen chloride.

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 from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent product from entering drains. Do not let this chemical enter the environment.

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. Avoid dust formation.

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:
Deliquescent. Protect from moisture. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:
Strong oxidizing agents
Peroxides
Potassium

Alkali Metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
Nickel Chloride, hexahydrate	7791-20-0	1 mg/m³ TWA	0.015 mg/m³ TWA	0.1 mg/m³ TWA	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Nickel Chloride, hexahydrate	7791-20-0	0.1 mg/m³ TWA	0.05 mg/m³ TWA	0.1 mg/m³ TWA	0.1 mg/m³ TWAEV

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Nickel Chloride, hexahydrate	7791-20-0	0.1 mg/m³ TWA	0.3 mg/m³ STEL 0.1 mg/m³ TWA

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation, especially in confined areas. 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
Gloves
Long sleeved clothing

Respiratory protection: Effective dust mask. or. Wear respirator with dust filter. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	**Appearance:** Deliquescent. Crystalline powder.	**Color:** Green.
Odor: Odorless.	**Taste** No information available.	**Formula:** NiCl2.6H2O
Molecular/Formula weight: 237.71 g/mol	**Flammability:** No information available	**Flashpoint (°C/°F):** No information available.
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):** 140°C/284°F	**Decomposition temperature(°C/°F):** 1001°C/1834°F (anhydrous)
Boiling point/range(°C/°F): 1783°C/3241°F	**Bulk density:** No information available	**Density (g/cm3):** No information available
Specific gravity: 3.55	**pH:** 4-6 (5%) 4.9 (10%)	**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:** Very soluble in water Soluble in Alcohol	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with strong oxidizing agents
Reactive with alkalis
Reactive with peroxides

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Excess Heat. Incompatible materials. Exposure to moist air. Exposure to moisture. Avoid dust formation.

Incompatible Materials:
Strong oxidizing agents
Peroxides
Potassium
Alkali Metals

Hazardous decomposition products: Nickel oxides. Hydrogen chloride.

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

Component Information

Nickel Chloride, hexahydrate	
CAS-No.	7791-20-0

LD50/oral/rat = 105 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 infomation available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 105 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. May cause allergic contact dermatitis. 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 eye irritation. Redness and pain.

Inhalation Toxic by inhalation. May cause irritation of the respiratory tract and mucous membranes irritation. 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 Toxic if swallowed. Causes digestive (gastrointestinal) tract irritation. Causes abdominal pain, nausea, vomiting, hypermotility, diarrhea. It may affect behavior/central nervous system (somnolence, excitement, giddiness, dizziness, headache, lassitude, central nervous system depression), heart (decreased myocardial contractility, myocardial damage). It may cause liver and kidney damage. It may affect the endocrine system and cause hyperglycemia.

Aspiration hazard No information available.

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

Chronic Toxicity Skin: May cause skin allergy (allergic skin reaction). Nickel and nickel compounds are among the most common sensitizers inducing allergic contact dermatitis.
Inhalation: Chronic inhalation nickel dust or fume can cause chronic hypertrophic rhinitis, sinusitis, nasal polyps, perforation of the nasal septum, chronic pulmonary irritation, fibrosis, pulmonary edema, pulmonary eosinophilia, Pneumoconiosis, allergies (asthma-like allergy), and cancer of the nasal sinus cavities, lungs, and possibly other organs. Future exposures can cause asthma attacks with shortness of breath, wheezing, cough, and/or chest tightness. Chronic inhalation of nickel dust or fume may also affect the liver (impaired liver function tests), and blood (changes in red blood cell count).
Ingestion: Prolonged or repeated ingestion of nickel can be a source chronic urticaria and other signs of allergy. Chronic ingestion of NIckel may also affect respiration and cause pneumoconiosis or fibrosis.
Note: In the general population, sensitization occurs from exposure to nickel-containing coins, jewelry, watches, cooking utensils, and clothing fasteners. Nickel allergic sensitization can also involve red and itchy eyes, irritation of the lungs (Loeffler's syndrome), asthma, and local or systemic reactions to nickel-containing prostheses. Once acquired, nickel sensitivity apparently never resolves.

Sensitization: May cause sensitization by inhalation and skin contact.

Mutagenic Effects: Suspected of causing genetic defects
Mutagenic effects in mammalian somatic cells
Genotoxicity in vitro - Human - HeLa cell DNA damage

Carcinogenic effects: May cause cancer.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Nickel Chloride, hexahydrate	7791-20-0	Group 1 - Carcinogenic to Humans - Monograph 49 [1990] Nickel and nickel compounds Monograph 100C [2012]	A4 Not classifiable as a Human Carcinogen	Known Human Carcinogen	Present	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: May cause adverse reproductive effects
Extra embryonic structures
Fetal death

Developmental Effects: May cause adverse developmental effects
May cause harm to the unborn child
May cause developmental abnormalities

Teratogenic Effects: May cause harm to the unborn child
May cause birth defects (teratogenic effects)

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
Gastrointestinal tract (GI). kidney. Blood. liver.

Target Organs: Kidneys. Blood. Liver. Mucous membrane. Respiratory system. Skin.
Gastrointestinal tract. Brain.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Nickel Chloride, hexahydrate - 7791-20-0

Freshwater Fish Species Data: 1.3 mg/L LC50 Cyprinus carpio 96 h (anhydrous)

Water Flea Data: 0.51 mg/L EC50 Daphnia magna 48h (anhydrous)

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. Do not re-use empty containers
Dispose of as unused product.

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Nickel Chloride, hexahydrate	7791-20-0	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (nickel chloride)
Hazard Class:	6.1
Subsidiary Class	No information available
Packing group:	III
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):	[DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.
Description:	UN3288,Toxic solid, inorganic, n.o.s. ,6.1,PG III

TDG (Canada)

UN-No:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (nickel chloride)
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	III
Marine Pollutant	No Information available
Description:	UN3288,TOXIC SOLID, INORGANIC, N.O.S.,6.1,PG III

ADR

UN-No:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (nickel chloride)
Hazard Class:	6.1
Packing Group:	III
Subsidiary Risk:	No information available
Description:	UN3288 Toxic solid, inorganic, n.o.s.,6.1,III

IMO / IMDG

UN-No:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (nickel chloride)
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	III
Marine Pollutant	No information available
EMS:	F-A

RID

UN-No:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (nickel chloride)
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	III
Description:	UN3288 Toxic solid, inorganic, n.o.s.,6.1,III

ICAO

UN-No:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (nickel chloride)
Hazard Class:	6.1
Subsidiary Risk:	No information available
Packing Group:	III

Description: UN3288,Toxic solid, inorganic, n.o.s.,6.1,PG III

IATA

UN-No: UN3288
Proper Shipping Name: Toxic solid, inorganic, n.o.s. (nickel chloride)
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 6L
Special Provisions No information available
Description: UN3288,Toxic solid, inorganic, n.o.s.,6.1,PG III

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Nickel Chloride, hexahydrate	7791-20-0	Not Listed	Not present	Present	Present (1)-242	Present	Present	Not present

U.S. Regulations

Nickel Chloride, hexahydrate

New Jersey RTK Hazardous Substance List: sn 4060
sn 2366
New Jersey (EHS) List: SN 2366 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present (nickel compounds)
Pennsylvania RTK: Enviromental Hazard
Pennsylvania RTK - Environmental Hazard List Present
Minnesota - Hazardous Substance List: Carcinogen
California Directors List of Hazardous Substances: Present (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 Chloride, hexahydrate	7791-20-0	carcinogen	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Nickel Chloride, hexahydrate	7791-20-0	None	None	None	nickel compounds	0.1 % de minimis concentration

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 Chloride, hexahydrate	7791-20-0	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: .

Component	WHMIS 2015 Hazard Classification
Nickel Chloride, hexahydrate 7791-20-0 (100)	Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.; Respiratory sensitizers - Category 1: H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.; Skin sensitizers - Category 1: H317 May cause allergic skin reaction.; Carcinogenicity - Category 1A: H350 May cause cancer.; Reproductive Toxicity - Category 1: H360 May damage fertility or the unborn child.; Reproductive Toxicity - Category 1B: H360 May damage fertility or the unborn child.; Reproductive Toxicity - Category 2: H361 Suspected of damaging fertility or the unborn child.; Specific target organ toxicity - Repeated exposure - Category 1: H372 Causes damage to organs through prolonged or repeated exposure.

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
D1B Toxic materials
D2A Very toxic materials

Components	WHMIS 1988
Nickel Chloride, hexahydrate	D1B D2A

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 Chloride, hexahydrate	7791-20-0	Not Listed	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Nickel Chloride, hexahydrate	7791-20-0	Present
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Nickel Chloride, hexahydrate	7791-20-0	Not listed

EU Classification

EU GHS - SV - CLP 172/2008

Components	CAS-No.	EU GHS - SV - CLP (172/2008)
Nickel Chloride, hexahydrate	7791-20-0	

EU - CLP (1272/2008)

R-phrase(s)
R25 - Toxic if swallowed.
R45 - May cause cancer.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R42/43 - May cause sensitization by inhalation and skin contact.

S -phrase(s)
S24 - Avoid contact with skin.
S29 - Do not empty into drains.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53 - Avoid exposure - obtain special instructions before use.
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

Components	CAS-No.	**Classification**	**Concentration Limits:**	**Safety Phrases**
Nickel Chloride, hexahydrate	7791-20-0		No information	

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

Indication of danger:
T - Toxic
Xi - Irritant.
N - Dangerous for the environment.

16. OTHER INFORMATION

Preparation Date: 5/9/2017
Revision Date: 5/9/2017
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