

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 01.15.2018

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Nickel Chloride Hexahydrate

SECTION 1: Identification

Product identifier

Product name: Nickel Chloride Hexahydrate

Product code: NC9750

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory chemicals

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331

1-717-632-1291

Emergency telephone number:

United States

ChemTel Inc

+1(800)255-3924

+1(813)248-0585

SECTION 2: Hazard identification

GHS classification:

Acute toxicity (oral), category 3

Acute toxicity (inhalation), category 3

Skin irritation, category 2

Skin sensitization, category 1

Respiratory sensitization, category 1

Germ cell mutagenicity, category 2

Carcinogenicity, category 1A

Reproductive toxicity, category 1B

Acute aquatic hazard, category 1

Chronic aquatic hazard, category 1

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H301 Toxic if swallowed

H331 Toxic if inhaled

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H315 Causes skin irritation
H317 May cause an allergic skin reaction
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341 Suspected of causing genetic defects
H350 May cause cancer
H360 May damage fertility or the unborn child
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Precautionary statements:

P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P271 Use only outdoors or in a well-ventilated area
P280 Wear protective gloves/protective clothing/eye protection/face protection
P272 Contaminated work clothing should not be allowed out of the workplace
P285 In case of inadequate ventilation wear respiratory protection
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P273 Avoid release to the environment
P321 Specific treatment (see supplemental first aid instructions on this label).
P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340+P311 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician
P362 Take off contaminated clothing and wash before reuse
P302+P352 If on skin: Wash with soap and water
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P308+P313 If exposed or concerned: Get medical advice/attention
P391 Collect spillage
P405 Store locked up
P403+P233 Store in a well ventilated place. Keep container tightly closed
P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7791-20-0	Nickel(II) chloride hexahydrate (1:2:6)	>95
CAS number: 7718-54-9	Nickel(II) chloride	<5

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

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Not determined or not available.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Move exposed individual to fresh air
Call a POISON CONTROL CENTER or seek medical attention

After skin contact:

Rinse affected area with soap and water
If symptoms develop or persist, seek medical attention
Wash affected area with soap and water
Seek medical attention if symptoms develop or persist

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention

After ingestion:

Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists
Immediately call a POISON CONTROL CENTER or seek medical attention
Do not induce vomiting
Rinse mouth and then drink plenty of water

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing
Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols
Avoid contact with skin, eyes and clothing

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SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

- Ensure adequate ventilation
- Ensure air handling systems are operational
- Wear protective eye wear, gloves and clothing

Environmental precautions:

- Should not be released into the environment
- Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

- Wear protective eye wear, gloves and clothing

Reference to other sections:

- Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

- Do not eat, drink, smoke or use personal products when handling chemical substances.
- Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities:

- Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

- No occupational exposure limits noted for the ingredient(s).

Biological limit values:

- No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

- Not determined or not applicable.

Appropriate engineering controls:

- Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

- Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

- Select glove material impermeable and resistant to the substance.

Respiratory protection:

- When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

- Wash hands before breaks and at the end of work.
- Avoid contact with skin, eyes and clothing.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	Green solid
Odor:	Odorless
Odor threshold:	Not determined or not available.
pH-value:	4 - 6 (5% aq. sol.)
Melting/Freezing point:	Not determined or not available.
Boiling point/range:	973°C
Flash point:	Not determined or not available.
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	1 mmHg at 615.6°C
Vapor density:	Not determined or not available.
Density:	Not determined or not available.
Relative density:	3.55 g/cm ³
Solubilities:	Soluble in water.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	> 140°C
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

Molecular weight	237.72 g/mol
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SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Incompatible products, dust generation.

Incompatible materials:

Strong acids, peroxides, metals.

Hazardous decomposition products:

Hydrogen chloride gas and Chlorine. Burning produces obnoxious toxic fumes.

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SECTION 11: Toxicological information

Acute toxicity

Assessment: Toxic if swallowed Toxic if inhaled

Product data: No data available.

Substance data:

Name	Route	Result
Nickel(II) chloride hexahydrate (1:2:6)	oral	LD50 - Rat - 681 mg/kg
	inhalation	Toxic if inhaled.
Nickel(II) chloride	oral	LD50 - Rat - 681 mg/kg
	inhalation	Toxic if inhaled.

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data: No data available.

Substance data:

Name	Result
Nickel(II) chloride hexahydrate (1:2:6)	Causes skin irritation.
Nickel(II) chloride	Causes skin irritation.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

Product data: No data available.

Substance data:

Name	Result
Nickel(II) chloride hexahydrate (1:2:6)	May cause an allergic skin reaction.
	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Nickel(II) chloride	May cause an allergic skin reaction.
	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carcinogenicity

Assessment: May cause cancer

Product data: No data available.

Substance data:

Name	Species	Result
Nickel(II) chloride hexahydrate (1:2:6)		May cause cancer by inhalation.
Nickel(II) chloride		May cause cancer by inhalation.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

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Germ cell mutagenicity

Assessment: Suspected of causing genetic defects

Product data: No data available.

Substance data:

Name	Result
Nickel(II) chloride hexahydrate (1:2:6)	Suspected of causing genetic defects.
Nickel(II) chloride	Suspected of causing genetic defects.

Reproductive toxicity

Assessment: May damage fertility or the unborn child

Product data: No data available.

Substance data:

Name	Result
Nickel(II) chloride hexahydrate (1:2:6)	May damage the unborn child.
Nickel(II) chloride	May damage the unborn child. Suspected of damaging fertility.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Nickel(II) chloride hexahydrate (1:2:6)	Causes damage to organs through prolonged or repeated exposure.
Nickel(II) chloride	May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Very toxic to aquatic life

Product data: No data available.

Substance data:

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Name	Result
Nickel(II) chloride hexahydrate (1:2:6)	LC50 - Fish - 96 H - 3.1 mg/l
	LC50 - Crustaceans - 48 H - 0.013 mg/l - 160 mg/l
	EC50 - Crustaceans - 48 H - 7.59 mg/l
	EC - Algae - 96 H - 17 mg/l

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.



SECTION 13: Disposal considerations

Disposal methods:



It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	UN3288
UN proper shipping name	Toxic Solid, Inorganic (Nickel (II) Chloride Hexahydrate) N.O.S,
UN transport hazard class(es)	6.1  
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN3288
UN proper shipping name	Toxic Solid, Inorganic (Nickel (II) Chloride Hexahydrate) N.O.S,
UN transport hazard class(es)	6.1  
Packing group	III

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Environmental hazards	Marine Pollutant
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN3288
UN proper shipping name	Toxic Solid, Inorganic (Nickel (II) Chloride Hexahydrate) N.O.S,
UN transport hazard class(es)	6.1  
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

7791-20-0	Nickel(II) chloride hexahydrate (1:2:6)	Not Listed
7718-54-9	Nickel(II) chloride	Listed

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 3-0-0

HMIS: 3-0-0-X

Initial preparation date: 01.15.2018

End of Safety Data Sheet