

Section 1. Identification

1.1 Product Identifier 0462

Product Name NICKEL CHLORIDE 6H₂O pure

CAS Number 7791-20-0

REACH Registration No 01-2119486973-20-XXXX

Molecular Formula NiCl₂ · 6H₂O = 237.69

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Acute toxicity, category 3 (oral)

Acute toxicity, category 3 (inhalation)

Skin corrosion/irritation, category 2

Respiratory sensitization, category 1

Skin sensitization, category 1

Germ cell mutagenicity, category 2

Carcinogenicity, category 1A

Reproductive toxicity, category 1B

Spec target organ tox - repeat, category 1

Hazard to aquatic environment, category 1

Hazard to aquatic environment, category 1

H301: Toxic if swallowed.

H331: Toxic if inhaled.

H315: Causes skin irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic defects.

H350: May cause cancer.

H360: May damage fertility or the unborn child.

H372: Causes damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements Toxic if swallowed. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Precautionary Statements Obtain special instructions before use. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Nickel (II) Chloride Hexahydrate	7791-20-0	231-743-0	01-2119486973-20-XXXX	>99%	Acute Tox. 3 (O), Acute Tox. 3 (I), Skin Irrit. 2, Resp. Sens. 1, Skin Sens. 1, Muta. 2, Carc. 1A, Repr. 1B, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Remove contaminated clothing immediately and wash before re-use. Thoroughly wash off skin with soap and water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
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5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Evacuate area immediately. Avoid breathing dust-wear respiratory protective equipment. Do not allow general use of area until it is safe to do so.

6.2 Environmental precautions

Environmental Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period)
Nickel (II) Chloride Hexahydrate	7791-20-0	>99%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.

Hand Protection Use nitrile gloves or PVC gauntlets.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Green deliquescent crystals or crystalline powder.
Odour Odourless.
pH 4 @ 20°C
Boiling Point Not available
Melting Point Not applicable
Flash Point 140 °C
Upper Flammable Limit Not applicable
Lower Flammable Limit Not applicable
Auto Ignition Not applicable

Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	Not available
Water Solubility	Very soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	No specific materials to avoid.
10.6	Hazardous Decomposition Products	Will decompose to emit fumes of nickel/ nickel oxide and irritant fumes of hydrogen chloride.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust will be irritating to the eyes.
Skin	Contact with the solid or dust will be irritating to the skin. Repeated exposure may cause dermatitis.
LD50 Skin	Not available
Ingestion	Toxic if swallowed. Ingestion may cause gastrointestinal irritation.
LD50 Oral	186 mg/kg Rat
Inhalation	Toxic if inhaled. Prolonged exposure to dust or fume concentrations above the occupational exposure limits may produce irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Carcinogenicity, category 1A.
Mutagenicity	May be a mutagen.
Reproductive Effects	May damage the unborn child.

Section 12. Ecological

12.1	Toxicity	Very toxic to aquatic life with long lasting effects.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dissolve in water and adjust pH to 7, then precipitate out as the sulphide. Filter off the insoluble material and dispose of at a licensed land-fill site. Destroy excess sulphide with sodium hypochlorite, neutralise the solution and wash to drain with copious amounts of water.
Contaminated Packaging	Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	3288
14.2 Proper Shipping Name	Toxic solid, inorganic, N.O.S. (Nickel Chloride)
14.3 Transport classes	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	E
14.4 Packing Group	III
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Acute toxicity, category 3 (oral); Acute toxicity, category 3 (inhalation); Skin corrosion/irritation, category 2; Respiratory sensitization, category 1; Skin sensitization, category 1; Germ cell mutagenicity, category 2; Carcinogenicity, category 1A; Reproductive toxicity, category 1B; Spec target organ tox - repeat, category 1; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H301, H311, H315, H317, H334, H341, H350, H360, H372, H410
Toxic if swallowed. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Precautionary Statements P201, P273, P280, P308+P313
Obtain special instructions before use. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF exposed or concerned: Get medical advice/attention.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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