




Nickel Chloride Solution	Pricing >
Nickel(II) Chloride	Pricing >
Ultra Dry Nickel Chloride	Pricing >

Linear Formula	NiCl ₂
Pubchem CID	24385
MDL Number	MFCD00011142
EC No.	231-743-0
IUPAC Name	dichloronickel
Beilstein/Reaxys No.	N/A
SMILES	Cl[Ni]Cl
Inchl Identifier	InChI=1S/2ClH.Ni/h2*1H;/q;+2/p-2
Inchl Key	QMMRZOWCJAIUJA-UHFFFAOYSA-L
Signal Word	Danger
Hazard Statements	H301 + H331-H315-H317-H334-H341-H350i-H360D-H372-H410
Hazard Codes	T,N
Precautionary Statements	P201-P261-P280-P284-P301 + P310 + P330-P304 + P340 + P312-P308 + P313-P403 + P233
Flash Point	Not applicable
Risk Codes	45-25-36/38-43-50
Safety Statements	53-26-36/37-45-61
RTECS Number	QR6475000
Transport Information	UN3288 - class 6.1 - PG 3 - EHS - RQ - Toxic solid, inorganic, n.o.s., HI: all
WGK Germany	3
GHS Pictograms	GHS09 Environment  GHS08 Health Hazard  GHS06 Skull and Crossbones 

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SAFETY DATA SHEET

Date Accessed: 04/24/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #7718-54-9

Relevant identified uses of the substance:
Scientific research and development

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Acute toxicity, Oral(Category 4), H302
Respiratory sensitisation(Category 1), H334
Skin sensitisation(Category 1), H317
Germ cell mutagenicity(Category 2), H341
Carcinogenicity(Category 1A), H350
Reproductive toxicity(Category 1B), H360
Specific target organ toxicity -repeated exposure(Category 1), H372
Acute aquatic toxicity(Category 1), H400
Chronic aquatic toxicity(Category 1), H410
For the full text of the H-Statements mentioned in this Section, see Section 16.
GHS Label elements, including precautionary statements
Pictogram



Signal word
Danger
Hazard statement(s)
H302
Harmful if swallowed.
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.
H372
Causes damage to organs through prolonged or repeated exposure.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201

Obtain special instructions before use.

P202

Do not handle until all safety precautions have been read and understood.

P260

Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264

Wash skin thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P272

Contaminated work clothing should not be allowed out of the workplace.

P273

Avoid release to the environment.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P285

In case of inadequate ventilation wear respiratory protection.

P301 + P312 + P330

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

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P304 + P341

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308 + P313

IF exposed or concerned: Get medical advice/ attention.

P333 + P313

If skin irritation or rash occurs: Get medical advice/ attention.

P363

Wash contaminated clothing before reuse.

P391

Collect spillage.

P405

Store locked up.

P501

Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS-none

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Synonyms: Nickel(II) chloride

Component

Nickel(II) chloride

CAS-No. 7718-54-9

EC-No. 231-743-0

Index-No. 028-011-00-6

Classification

Acute Tox.3; Skin Irrit.2; Resp. Sens.1; Skin Sens.1;
Muta.2; Carc.1A; Repr.1B; STOT RE1; Aquatic Acute
1; Aquatic Chronic 1; H301 + H331, H315, H317,
H334, H341, H350, H360, H372, H410

For the full text of the H-Statements mentioned in this
Section, see Section 16.

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General advice

Move out of dangerous area.

Consult a physician. Show this safety data sheet to
the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not
breathing, give artificial respiration. Consult a
physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim
immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious
person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and
delayed

The most important known symptoms and effects are
described in the labelling (see section 2) and/or in
section 11

Indication of any immediate medical attention and
special treatment needed

No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture
Hydrogen chloride gas, Nickel/nickel oxides
Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
Further information
No data available

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
Evacuate personnel to safe areas.
For personal protection see section 8.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
Reference to other sections
For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
For precautions see section 2.
Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects
Specific end use(s)
Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Form: liquid

Odor

No data available

Odor Threshold

No data available
pH
No data available
Melting point/freezing point
No data available
Initial boiling point and boiling range
No data available
Flash point
No data available
Evaporation rate
No data available
Flammability (solid, gas)
No data available
Upper/lower flammability or explosive limits
No data available
Vapor pressure
No data available
Vapor density
No data available
Relative density
No data available
Water solubility
No data available
Partition coefficient: n-octanol/water
No data available
Auto-ignition temperature
No data available
Decomposition temperature
No data available
Viscosity
No data available
Explosive properties
No data available
Oxidizing properties
No data available
Other safety information
No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity
No data available
Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Conditions to avoid
No data available
Incompatible materials
Peroxides
Hazardous decomposition products
Other decomposition products-No data available
In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 1-Group 1: Carcinogenic to humans(Nickel(II) chloride)

NTP: Known to be human carcinogen(Nickel(II) chloride)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity -single exposure

No data available

Specific target organ toxicity -repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

Gastrointestinal disturbance, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach-Irregularities-Based on Human Evidence

Stomach-Irregularities-Based on Human Evidence(Nickel(II) chloride)

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability:

No data available

Bioaccumulative potential:

No data available

Mobility in soil:

No data available

Results of PBT and vPvB assessment:
PBT/vPvB assessment not available as chemical
safety assessment not required/not conducted
Other adverse effects
An environmental hazard cannot be excluded in the
event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
Contact a licensed professional waste disposal
service to dispose of this material.
Dissolve or mix the material with a combustible
solvent and burn in a chemical incinerator equipped
with an afterburner and scrubber.
Offer surplus and non-recyclable solutions to a
licensed disposal company.
Contaminated packaging
Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
IMDG
UN number: 3082
Class: 9
Packing group: III
EMS-No: F-A, S-F
Proper shipping name:
ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.(Nickel(II) chloride)
Marine pollutant: yes
IATA
UN number: 3082
Class: 9
Packing group: III
Proper shipping name: Environmentally hazardous
substance, liquid, n.o.s.(Nickel(II) chloride)
Further information
EHS-Mark required (ADR 2.2.9.1.10, IMDG code
2.10.3) for single packagings and combination
packagings containing inner packagings with
Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Nickel(II) chloride

CAS-No.

7718-54-9

Revision Date

1993-04-24

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Nickel(II) chloride

CAS-No.

7718-54-9

Revision Date

1993-04-24

Pennsylvania Right To Know Components

Water

CAS-No.

7732-18-5

Revision Date

Nickel(II) chloride

7718-54-9

1993-04-24

New Jersey Right To Know Components

Water

CAS-No.7732-18-5

Revision Date

1993-04-24

Nickel(II) chloride

7718-54-9

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

CAS-No.

7718-54-9

Revision Date

2007-09-28

Nickel(II) chloride

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present

state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.
