

SDS #: 541

Revision Date: April 30, 2018

1/13/2025: File reviewed; more current MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Signal Word DANGER

Nickel Chloride

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-10043

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral and inhalation (Category 3). Toxic if swallowed or inhaled (H301+H331). Do not eat, drink or smoke when using this product (P270).



Hazard class: Skin corrosion or irritation (Category 2). Causes skin irritation (H315).

Hazard class: Sensitization, skin and respiratory tract (Category 1). May cause an allergic skin reaction, allergy or asthma symptoms or breathing difficulties if inhaled (H317+H334). Avoid breathing dust or fumes (P261).



Hazard class: Germ cell mutagenicity (Category 2). Suspected of causing genetic defects (H341). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281).

Hazard class: Carcinogenicity (Category 1). May cause cancer (H350). Nickel compounds are known human carcinogens by inhalation of dust (IARC-1).

Hazard class: Reproductive toxicity (Category 1). May damage fertility or the unborn child (H360). Hazard class: Specific target organ toxicity, repeated exposure (Category 1). Causes damage to organs through prolonged or repeated exposure (H372).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Nickel chloride, hexahydrate	7791-20-0	NiCl ₂ •6H ₂ O	237.72	
Synonyms: Nickel(II) chloride; Nickelous chloride; Nickel dichloride				

SECTION 4 — FIRST AID MEASURES

If exposed or concerned: Call a POISON CENTER or physician (P311). If inhaled: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician (P342+P311). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do; continue rinsing (P337+P313). If eye irritation persists eyes: Get medical advice/attention (P301+P310). If on skin: Rinse cautiously with water for several minutes (P351). If skin irritation occurs: If skin irritation or rash occurs: Get medical advice/attention (P333+P313). If swallowed: Rinse mouth. Immediately call a POISON CENTER or physician (P301+P330+P310).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid. NFPA Code

When heated to decomposition, may emit toxic fumes.

None established

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfates, thiosulfates and phosphates.

Deliquescent. Store in a cool, dry place within a Flinn Chem-SafTM bag. Keep container tightly closed (P233). Use only in a hood or in a well-ventilated area.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Contaminated clothing should not be allowed out of the workplace (P272). Use only in a hood or in a well-ventilated area. Wear respiratory protection (P284).

Exposure guidelines: PEL 1 mg/m³ (OSHA), 0.1 mg/m³ (inhalable fraction) (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Green scales. Odorless. Melting point: 1001 °C Soluble: Water, alcohol, and ammonium hydroxide Specific gravity: 3.55

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with peroxides.

Shelf life: Poor, deliquescent. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, irritant, sensitizer, GI disturbances ORL-RAT LD₅₀: 105 mg/kg Chronic effects: Known carcinogen, dermatitis IHL-RAT LC₅₀: N.A.

Target organs: Lungs SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #27f is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-743-0).

SECTION 16 — OTHER INFORMATION

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EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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