SECTION 1            PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Nickel (II) Chloride Hexahydrate
PRODUCT NUMBER: 2683
CAS NUMBER: 7791-20-0
SYNONYMS: Nickelous chloride hexahydrate

MANUFACTURER:
Prochem, Inc.
826 Roosevelt Road
Rockford, IL    61109
PHONE: 815-398-1788
FAX: 815-398-1810
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2           HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram

Signal Word  Danger

Hazard Statements

H301+H331  Toxic if swallowed or if inhaled.
H315     Causes skin irritation.
H317     May cause an allergic skin reaction.
H334     May cause allergy or asthma symptoms of breathing difficulties if inhaled.
H341     Suspected of causing genetic defects.
H350     May cause cancer.
H360     May damage fertility or the unborn child.
H410     Very toxic to aquatic life with long lasting effects.

Precautionary Phrases

P201    Obtain special instructions before use.
P202    Do not handle until all safety precautions have been read and understood.
P261    Avoid breathing dust/fume/gas/mist/vapors/spray.
P270    Do not eat, drink, or smoke when using this product.
P273    Avoid release to the environment.
P301+P310+P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340+P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.
SECTION 2  HAZARDS IDENTIFICATION (Cont.)

HMIS CLASSIFICATION:
Health: 2  Chronic: *  Fire: 0  Reactivity Hazard: 1
NFPA RATING:
Health: 2  Flammability: 0  Reactivity Hazard: 1

EYE CONTACT: May cause eye irritation.
SKIN CONTACT: Causes skin irritation. May cause an allergic skin reaction.
INHALATION: Toxic if inhaled.
INGESTION: Toxic if swallowed.

SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: NiCl₂•6H₂O
Molecular Weight: 237.69

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Nickel (II) Chloride Hexahydrate</td>
<td>7791-20-0</td>
<td>100</td>
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</tbody>
</table>

SECTION 4  FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.
SKIN EXPOSURE: Wash affected area with soap and plenty of water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.
INHALATION: Remove to fresh air and keep at rest. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases, seek immediate medical assistance.
INGESTION: Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5  FIREFIGHTING MEASURES

FLASH POINT: Product is not flammable
AUTO IGNITION TEMPERATURE: Not available
EXPLOSION LIMITS: Product does not present explosion hazard
EXTINGUISHING MEDIUM: Use fire fighting measures that suit the surrounding fire.
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Hydrogen chloride and nickel oxides

SECTION 6  ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust.
ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing to be released into the environment.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Sweep up and place in suitable container for proper disposal.

SECTION 7  HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes.
CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Hygroscopic. Store away from oxidizing agents and strong bases.
SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS:

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure Limits</th>
<th>Basis</th>
<th>Entity</th>
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<tbody>
<tr>
<td>Nickel (II) Chloride Hexahydrate</td>
<td>1.0 mg/m³</td>
<td>PEL</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td>0.1 mg/m³</td>
<td>TLV</td>
<td>ACGIH</td>
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</tbody>
</table>

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value over 8 hours of work.

EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.

SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.

VENTILATION: Provide local exhaust, preferably mechanical.

RESPIRATOR: Use an approved respirator.

ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Green solid

ODOR: None

MOLECULAR WEIGHT: 237.69

BOILING POINT: No data available

MELTING POINT: 140° C

SPECIFIC GRAVITY: 1.92 gm/ml

VAPOR DENSITY: No data available

SOLUBILITY: Soluble

SECTION 10  STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Moisture

INCOMPATIBILITY: Strong oxidizing agents and peroxides

DECOMPOSITION PRODUCTS: Hydrogen chloride and nickel oxides

SECTION 11  TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – rat – 105 mg/kg

CARCINOGENIC EFFECTS: Carcinogen to humans

MUTAGENIC EFFECTS: Not available

TETRATOGENIC EFFECTS: Not available

CHRONIC TOXICITY: Not available

RTECS: QR6480000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12  ECOLOGICAL DATA

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES: EC50 – Daphnia magna (Water flea) – 0.51 mg/l – 48 h.

SECTION 13  DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.
SECTION 14  TRANSPORTATION DATA

UN3288
Toxic solid, inorganic, n.o.s.
(Nickel (II) Chloride hexahydrate)
CLASS 6.1
PG III

Marine Pollutant: No

SECTION 15  REGULATORY INFORMATION

SARA 302/304:  Not Listed
SARA 311/312:  Not Listed
SARA (TITLE 313): Nickel (II) Chloride Hexahydrate
CALIFORNIA PROP. 65: Nickel (II) Chloride Hexahydrate
MASSACHUSETTS RIGHT TO KNOW COMPONENTS: Nickel (II) Chloride Hexahydrate
NEW JERSEY RIGHT TO KNOW COMPONENTS: Nickel (II) Chloride Hexahydrate
PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Nickel (II) Chloride Hexahydrate

SECTION 16  OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.
DATE PREPARED:  03/15
SDS DEPT.