SAFETY DATA SHEET

1. IDENTIFICATION

Product code: S1235
Product Name: SODIUM CHLORATE, CRYSTAL, REAGENT

Other means of identification
Synonyms:
- Chloric acid, sodium salt
- Chlorate de sodium
- Chlorate salt of sodium
- Soda chlorate
- Sodakem

CAS #: 7775-09-9
RTECS #: FO0525000
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use:
- Bleaching agent.
- Herbicide.
- Agriculture.
- Processing aid.
- Manufacture of substances.

Uses advised against:
No information available

Supplier:
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number:
Chemtrec 1-800-424-9300

Contact Person:
- Martin LaBenz (West Coast)
- Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2B</td>
</tr>
<tr>
<td>Oxidizing solids</td>
<td>Category 1</td>
</tr>
</tbody>
</table>
Danger

Hazard statements
Harmful if swallowed
Causes eye irritation
May cause fire or explosion; strong oxidizer

Hazard statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing/.? /combustible materials
Take any precaution to avoid mixing with combustibles .?
Wear protective gloves
Wear eye/face protection
Wear fire/flame resistant/retardant clothing

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO₂or Halon may provide limited control.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Hazard statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>7775-09-9</td>
<td>100</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

First aid measures
General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Harmful if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed
Notes to Physician: Treat symptomatically

Protection of first-aiders
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media
Suitable Extinguishing Media: Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.


Specific hazards arising from the chemical
Hazardous Combustion Products: Hydrogen chloride, Chlorine, chlorine dioxide, sodium oxides
Specific hazards:

Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.)
The product is not flammable, but it may cause fire when in contact with other material
Contact with combustible or organic materials may cause fire
Will accelerate burning when involved in a fire
Container explosion may occur under fire conditions or when heated
It is a strong oxidizer, reacting with organic materials (wood, paper, oils, clothing, etc.).
Paper impregnated with sodium chlorate can be ignited by static sparks.
May react explosively with hydrocarbons (fuels).
Mixtures with ammonium salts, powdered metals, phosphorus, silicon, sulfur, or sulfides are readily ignited and potentially explosive.
Mixtures with fibrous or absorbent organic materials (charcoal, flour, shellac, sawdust, sugar) are hazardous and can be caused to explode by static friction or shock.
It may react explosively with alkenes + postassium osmate, aluminum + rubber, grease, leather, sulfides, cyanides, cyanoborane oligomer, organic matter, paint + polyethylene, sodium phosphinate.
Mixtures with finely divided combustible materials can react explosively.

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For large fires, flood fire area with water from a distance. Apply water from as far a distance as possible. Cool affected containers with flooding quantities of water. DO NOT use combustible materials such as sawdust. Do not get water inside containers.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid dust formation. DO NOT use combustible materials such as sawdust. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent product from entering drains. Do not let this chemical enter the environment.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Clean contaminated surface thoroughly. Sweep up and shovel. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Do not breathe vapours/dust. Do not ingest. Keep away from heat and sources of ignition. When using do not smoke. Keep away from combustible material. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions: Keep container tightly closed in a dry and well-ventilated place. Do not store near combustible materials. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.


8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>7775-09-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Canada

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>7775-09-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Product code: S1235 Product name: SODIUM CHLORATE, CRYSTAL, REAGENT
**Appropriate engineering controls**

**Engineering measures to reduce exposure:**
Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

**Eye protection:** Goggles. Safety glasses with side-shields.

**Skin and body protection:** Chemical resistant apron. Gloves. Long sleeved clothing. Flame retardant protective clothing.

**Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

---

9. **PHYSICAL AND CHEMICAL PROPERTIES**
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless.</td>
</tr>
<tr>
<td>Molecular/Formula weight</td>
<td>106.45 g/mol</td>
</tr>
<tr>
<td>Flashpoint (°C/°F):</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower Explosion Limit (%):</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/range(°C/°F):</td>
<td>248-261°C/478-502°F</td>
</tr>
<tr>
<td>Bulk density:</td>
<td>2.49</td>
</tr>
<tr>
<td>Vapor pressure @ 20°C (kPa):</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC content (g/L):</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Crystalline solid.</td>
</tr>
<tr>
<td>Taste</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability:</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper Explosion Limit (%):</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point/range(°C/°F):</td>
<td>300°C/572°F (dec)</td>
</tr>
<tr>
<td>Density (g/cm3):</td>
<td>2.49</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm):</td>
<td>No information available</td>
</tr>
<tr>
<td>Miscibility:</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Soluble in Water</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

#### Reactivity
- Can react explosively with many reducing agents
- Contact with powdered metals may cause fire or explosion
- Highly reactive with combustible materials and organic materials
- Reactive with strong acids
- Contact with acids or acid fumes may evolve highly toxic hydrogen chloride fumes
- It is a strong oxidizer.
- Mixtures with ammonium salts, ammonium thiosulfate, powdered metals, phosphorus, silicon, sulfur, antimony sulfide or sulfides are readily ignited and potentially explosive.
- Paper impregnated with sodium chlorate can be ignited by static sparks.
- Violent reaction or ignition with aluminum, ammonium sulfate, Sb2S3, arsenic, arsenic trioxide, 1,3-bis(trichloromethylbenzene) + heat, MnO2, phosphorus, cyanides, potassium cyanide, osmium + heat, paper, thiocyanates, triethylene glycol + wood, zinc, alkenes + potassium osmate, aluminum + rubber, cyanoborane oligomer, paint + polyethylene, sodium phosphinate, grease.
- It can also react violently with paper, metal sulfides, dibasic organic acids, organic materials, absorbant organic materials (charcoal, carbon, flour, shellac, sawdust, sugar), combustible materials

#### Chemical stability
- Stable under recommended storage conditions

#### Possibility of Hazardous Reactions:
- Hazardous polymerization does not occur

#### Conditions to avoid:
- Avoid dust formation. Contact with combustible materials (wood, paper, oil, clothing, etc.). Exposure to moisture. Exposure to moist air. Heat, flames and sparks.
- Incompatible materials. Contact with finely divided (powdered) metals.

#### Incompatible Materials:
- Strong acids. Cyanides.
**Hazardous decomposition products:** Sodium oxides. Hydrogen chloride. Chlorine.

**Other Information**

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

---

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Principal Routes of Exposure:**
Ingestion. Inhalation.

**Acute Toxicity**

#### Component Information

**Sodium Chlorate - 7775-09-9**

- **LD50/oral/rat** = 1200 mg/kg Oral LD50 Rat (LOLI; RTECS)
  1200-9045 mg/kg oral LD50 rat (EU Chemicals Bureau IUCLID dataset)
- **LD50/oral/mouse** = 3600 mg/kg oral LD50 mouse (RTECS)
  7850-8850 mg/kg oral LD50 mouse (EU Chemicals Bureau IUCLID dataset)
- **LD50/dermal/rat** = No information available
- **LD50/dermal/rabbit** = No information available
- **LC50/inhalation/rat** = 28 g/m³ Inhalation LC50 Rat 1 h
- **LC50/inhalation/mouse** = No information available
- **Other LD50 or LC50 information** = 7200 mg/kg oral LD50 rabbit
  1350 mg/kg oral LD50 cat
  700 mg/kg oral LD50 dog
  6100 mg/kg oral LD50 guinea pig

**Product Information**

- **LD50/oral/rat** =
  VALUE - Acute Tox Oral = 1200mg/kg

- **LD50/oral/mouse** =
  Value - Acute Tox Oral = 3600mg/kg

- **LD50/dermal/rabbit**
  VALUE - Acute Tox Dermal = No information available

- **LD50/dermal/rat**
  VALUE - Acute Tox Dermal = No information available

- **LC50/inhalation/rat**
  VALUE - Vapor = No information available
  VALUE - Gas = No information available
  VALUE - Dust/Mist = 28000mg/m³ (1-hr)

- **LC50/inhalation/mouse**
  VALUE - Vapor = No information available
  VALUE - Gas = No information available
  VALUE - Dust/Mist = No information available
Symptoms

Skin Contact: Mild skin irritation.

Eye Contact: Causes eye irritation.

Inhalation
It can irritate the nose and throat and cause coughing and shortness of breath, but it is not clear how much can be absorbed through the lungs. It may cause ulceration of the nasal septum. It may cause pulmonary edema, chemical pneumonitis, and upper airway obstruction caused by edema.

Ingestion
May cause methemoglobinemia, (the formation of methemoglobin in the blood which causes deficient oxygenation of the blood due to decreased available hemoglobin). Signs and symptoms of methemoglobinemia include shortness of breath, cyanosis (a bluish discoloration of the skin, lips, mucous membranes), mental status changes such as headache, mental impairment, fatigue, muscular weakness, exercise intolerance, lightheadness, dizziness, incoordination, seizures, and loss of consciousness. Arterial blood with elevated methemoglobin levels has a characteristic chocolate-brown color as compared to normal bright red oxygen containing arterial blood. Severe methemoglobinemia is characterized by bradycardia or tachyrdardia (slow or fast heart beat), dysrhythmias, seizures, coma and death. It acts catalytically to induce Methemoglobinemia. The rate of methemoglobin formation is fairly slow, and dangerous levels can occur insidiously and without warning. Effects of sodium chlorate poisoning include gastrointestinal tract irritation with nausea, vomiting, abdominal pain, diarrhea. Other symptoms may include staggering gait, dizziness, faintness, cardiovascular collapse, pallor, cyanosis, shortness of breath, massive hemolysis, anemia, dark-colored/bloody urine, anuria, kidney failure from tubular deposition of red blood cell breakdown products, coma, and convulsions.

Aspiration hazard
No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity
Skin: Prolonged or repeated skin contact can cause dermatitis, and skin lesions. Inhalation/Ingestion: Prolonged or repeated inhalation or ingestion may cause sore throat, nausea, sweating. Prolonged or repeated ingestion may also affect the blood (changes in red blood cell count, changed in white blood cell count), metabolism (loss of appetite, weight loss). It may also affect the kidneys.

Sensitization:
No information available

Mutagenic Effects:
Mutations in microorganisms
Experiments with bacteria and/or yeast have shown mutagenic effects

Carcinogenic effects:
Not considered carcinogenic

<table>
<thead>
<tr>
<th>Components</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Reproductive toxicity
No data is available

Product code: S1235  Product name: SODIUM CHLORATE, CRYSTAL, REAGENT
Reproductive Effects: Although no information has been found regarding the reproductive hazards of Sodium Chlorate, substances which can induce methemoglobinemia are of concern for possible reproductive effects since the fetus has an increased oxygen demand. Fetal hemoglobin is more easily oxidized to methemoglobin than is adult hemoglobin, and fetal methemoglobin is reduced back to normal more slowly than the adult form.

Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity
STOT - single exposure: No information available
STOT - repeated exposure: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Sodium Chlorate - 7775-09-9
Freshwater Algae Data: > 3137 mg/L NOEC Desmodesmus subspicatus growth inhibition
Freshwater Fish Species Data: 13500 mg/L LC50 Pimephales promelas 96 h 1
1750 mg/L LC50 Oncorhynchus mykiss 96 h 1
7090 mg/L LC50 Cyprinus carpio 96 h 1
1100mg/L LC50Oncorhynchus masou 96 h

Persistence and degradability: No information available
Bioaccumulative potential: No information available
Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products: Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging: Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
UN-No: UN1495
Proper Shipping Name: Sodium chlorate

Product code: S1235 Product name: SODIUM CHLORATE, CRYSTAL, REAGENT
14. TRANSPORT INFORMATION

Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: II
ERG No: 140
Marine Pollutant: No data available
DOT RQ (lbs): No information available

Symbol(s):

TDG (Canada)
 UN-No: UN1495
 Proper Shipping Name: Sodium chlorate
 Hazard Class: 5.1
 Subsidiary Risk: No information available
 Packing Group: II
 Description: No information available

ADR
 UN-No: UN1495
 Proper Shipping Name: Sodium chlorate
 Hazard Class: 5.1
 Packing Group: II
 Subsidiary Risk: No information available
 Classification Code: No information available
 Description: No information available
 CEFIC Tremcard No: No information available

IMO / IMDG
 UN-No: UN1495
 Proper Shipping Name: Sodium chlorate
 Hazard Class: 5.1
 Subsidiary Risk: No information available
 Packing Group: II
 Description: No information available
 IMDG Page: No information available
 Marine Pollutant: No information available
 EMS: F-H
 MFAG: No information available
 Maximum Quantity: No information available

RID
 UN-No: UN1495
 Proper Shipping Name: Sodium chlorate
 Hazard Class: 5.1
 Subsidiary Risk: No information available
 Packing Group: II
 Classification Code: No information available
 Description: No information available

ICAO
 UN-No: UN1495
 Proper Shipping Name: Sodium chlorate
 Hazard Class: 5.1
 Subsidiary Risk: No information available
 Packing Group: II
 Description: No information available

Product code: S1235  Product name: SODIUM CHLORATE, CRYSTAL, REAGENT
14. TRANSPORT INFORMATION

IATA

UN-No: UN1495  
Proper Shipping Name: Sodium chlorate  
Hazard Class: 5.1  
Subsidiary Risk: No information available  
Packing Group: II  
ERG Code: 5L  
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS (1)-239</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>Present</td>
<td>Present KE-31386</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Present 231-887-4</td>
</tr>
</tbody>
</table>

U.S. Regulations

Sodium Chlorate

Massachusetts RTK: Present  
New Jersey RTK Hazardous Substance List: 1688  
Pennsylvania RTK: Present


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHMIS hazard class:
C Oxidizing materials  
D1B Toxic materials  

Sodium Chlorate  
C D1B

Product code: S1235  
Product name: SODIUM CHLORATE, CRYSTAL, REAGENT
Sodium Chlorate

**Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

### Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

### EU Classification

**R-phrase(s)**

- R22 - Harmful if swallowed.
- R9 - Explosive when mixed with combustible material.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-phrase(s)**

- S2 - Keep out of the reach of children.
- S13 - Keep away from food, drink and animal feedingstuffs.
- S17 - Keep away from combustible material.
- S46 - If swallowed, seek medical advice immediately and show this container or label.
- S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chlorate</td>
<td>Xn; R22 N; R51-53 O; R9</td>
<td>No information</td>
<td>S2 S13 S17 S46 S61</td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

### Indication of danger:

Xn - Harmful.
O - Oxidising.
N - Dangerous for the environment.

Product code: S1235

Product name: SODIUM CHLORATE, CRYSTAL, REAGENT
16. OTHER INFORMATION

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet