Section 1. Product and Company Identification

**Product Name**  Sodium Bromate  
**CAS Number**  7789-38-0

Parchem - fine & specialty chemicals  
415 Huguenot Street  
New Rochelle, NY 10801  
☎️ (914) 654-6800  📧 (914) 654-6899  
🌐 parchem.com  📧 info@parchem.com

EMERGENCY RESPONSE NUMBER  
CHEMTEL  
Toll Free US & Canada: 1 (800) 255-3924  
All other Origins: 1 (813) 248-0585  
Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**  
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
Oxidizing solids (Category 2), H272  
Acute toxicity, Oral (Category 4), H302  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Specific target organ toxicity- single exposure (Category 3), Respiratory system, H335

**GHS Label Elements**  
Pictograms:

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="" /></td>
<td>Oxidizer</td>
</tr>
<tr>
<td><img src="image" alt="" /></td>
<td>Caution</td>
</tr>
</tbody>
</table>

**Signal word**: DANGER

**Hazard and precautionary statements**

**Hazard Statements**

- H272 May intensify fire; oxidizer.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

**Precautionary Statements**

- P210 Keep away from heat.
- P220 Keep/Store away from clothing/combustible materials.
- P221 Take any precaution to avoid mixing with combustibles.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P321 Specific treatment (see supplemental first aid instructions on this label).
P330 Rinse mouth.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
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

**Acute Effects**

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

**Carcinogenicity:** IARC, NTP, and OSHA do not list Sodium Bromate as a carcinogen.

**Medical Conditions Aggravated by Long-term Exposure**

**Chronic Effects:** Not available.

**HMIS Rating**

**Health:** 2

**Flammability:** 0

**Reactivity:** 2
Section 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Sodium Bromate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym(s)</td>
<td>Bromic Acid, Sodium Salt</td>
</tr>
<tr>
<td>Formula</td>
<td>NaBrO₃</td>
</tr>
<tr>
<td>CAS Number</td>
<td>7789-38-0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Bromate</td>
<td>7789-38-0</td>
<td>&gt; 99%</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

**Inhalation**: Remove from exposure to fresh immediately. If not breath, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. give oxygen.
Get medical aid

**Eye Contact**: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.

**Skin Contact**: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash before reuse.

**Ingestion**: If victim is conscious and alert, give 2 full cups of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

After first aid, get appropriate in-plant, paramedic, or community medical support.

**Note to Physicians**: Treat symptomatically and supportively.

**Special Precautions/Procedures**: N/A

Section 5. Firefighting Measures

**Flash Point**: Non-combustible.

**Auto-ignition Temperature**: N/A

**LEL**: N/A

**UEL**: N/A

**Flammability Classification**: Non-combustible.

**Extinguishing Media**: Cool containers with flooding quantities of water until well after fire is out. For small fires DO NOT use dry chemicals, carbon dioxide, halon, or foams. USE WATER ONLY. For large fires flood fire with water from a distance.

**Unusual Fire or Explosion Hazards**: Dangerous fire hazard. Shock sensitive when mixed with organic and powdered metals, can react explosively.

**Firefighting Instructions**: Do not release runoff from fire control methods to sewers or waterways.

**Firefighting Equipment**: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.
Section 6. Accidental Release Measures

**Spill /Leak Procedures:** Clean up spills immediately, observing precautions in the Protective Equipment section.

**Small Spills:** Sweep up, then place into a suitable container for disposal.

**Large Spills:** For large spills, dike far ahead of spill for later disposal. Do not release into sewers or waterways.

**Cleanup:** Avoid generating dusty conditions. Provide ventilation. Do not use combustible materials such as paper towels to clean up spill.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7. Handling and Storage

**Handling Precautions:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage Requirements:** Do not store near combustible materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8. Exposure Controls / Personal Protection

**Engineering Controls**

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Administrative Controls**

**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection,
cleaning, and convenient, sanitary storage areas.

**Protective Clothing/Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye and face protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes clean personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

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### Section 9. Physical and Chemical Properties

**Physical State:** Solid  
**Appearance and Odor:** white crystal/powder - odorless  
**Odor Threshold:** N/A  
**Vapor Pressure:** N/A  
**Vapor Density (Air=1):** 5.2  
**Formula Weight:** 150.892  
**Density/Specific Gravity (H₂O=1, at 4°C):** 3.339  
**pH:** Neutral  
**Water Solubility:** Soluble/decomposes.  
**Other Solubilities:** N/A  
**Boiling Point:** 1390°C  
**Freezing/Melting Point:** 381°C  
**Viscosity:** N/A  
**Refractive Index:** N/A  
**Surface Tension:** N/A  
**%Volatile:** N/A  
**Evaporation Rate:** N/A  

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### Section 10. Stability and Reactivity

**Stability:** Sodium Bromate is stable at room temperature in closed containers under normal storage and handling conditions.  
**Polymerization:** Hazardous polymerization cannot occur.  
**Chemical Incompatibilities:** Strong reducing agents, finely powdered metals, sulfur, arsenic, metal sulfide, organic matter, phosphorus, aluminum, carbon, copper, lubricant.  
**Conditions to Avoid:** Incompatible materials, dust generation, combustible materials.  
**Hazardous Decomposition Products:** Thermal oxidative decomposition of Sodium Bromate can produce toxic fumes of sodium oxide, hydrogen bromide, oxygen.
Section 11. Toxicological Information

Toxicity Data*
Acute Oral Effects
LD$_{50}$: 250 mg/kg (rabbit).

Chronic Effects
Carcinogenicity: Not listed
Mutagenicity: No information available.
Teratogenicity: No information available.

* See NIOSH, RTECS (EF8750000), for additional toxicity data.

Section 12. Ecological Information

Ecotoxicity: Not available.
Environmental Fate: Not available.
Environmental Degradation: Not available.
Soil Absorption/Mobility: N/A

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

US DOT (49 CFR 172.101)
Proper Shipping Name: Sodium Bromate
Hazard Class: 5.1
UN Number: UN1494
Packing Group: II

IATA
Proper Shipping Name: Sodium Bromate
Hazard Class: 5.1
UN Number: UN1494
Packing Group: II

TDG
Proper Shipping Name: Sodium Bromate
Hazard Class: 5.1
UN Number: UN1494
Packing Group: II
IMDG/IMO

**Proper Shipping Name:** Sodium Bromate
**Hazard Class:** 5.1
**UN Number:** UN1494
**Packing Group:** II

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**Section 15. Regulatory Information**

**US Federal**

**TSCA**
CAS# 7789-38-0 is listed on the TSCA inventory

**Health & Safety Reporting List:** None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules:** None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b:** None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule:** None of the chemicals in this material have a SNUR under TSCA.

**SARA**

**Section 302 (RQ):** None of the chemicals in this material have an RQ.

**Section 302 (TPQ):** None of the chemicals in this product have a TPQ.

**SARA Codes**

**SARA 311/312 Hazards:** Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard, flammable.

**Section 313:** No chemicals are reportable under Section 313.

**Clean Air Act**
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

**Clean Water Act**
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:** None of the chemicals in this product are considered highly hazardous by OSHA.

**State Regulations**
SODIUM BROMATE can be found on the following state right to know lists: New Jersey.

**California No Significant Risk Level:** None of the chemicals in this product are listed.
**European/International Regulations**  
European Labeling in Accordance with EC Directives  
**Hazard Symbols:** O

**Risk Phrases**  
R8 Contact with combustible material may cause fire  
R9 Explosive when mixed with combustible material.

**Safety Phrases**  
S13 Keep away from food, drink, and animal feeding stuffs  
S17 Keep away from combustible material.  
S2 Keep out of reach of children  
S24/25 Avoid contact with skin and eyes.  
S46 If swallowed, seek medical advice immediately and show this container or label.

**WGK (Water Danger/Protection):** No information available

**Canada**  
CAS# 7789-38-0 is listed on Canada’s DSL/NDSL List  
This product has a WHMIS classification of C, D2B.  
CAS# 7789-38-0 is not listed on Canada’s Ingredient Disclosure List.

**Section 16. Other Information**

**Disclaimer:** 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.

**REVISION DATE:** 1/22/2016