SAFETY DATA SHEET (SDS)

1. PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: TroyCare™ BC02
MANUFACTURER: Troy Chemical Corporation

CHEMICAL NAME: Not applicable
CHEMICAL FAMILY: Not applicable
FORMULA: Proprietary
SYNONYMS: None

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
TroyCare™ BC02 is a clear colorless to yellow liquid with a characteristic odor. Corrosive liquid. May cause severe eye irritation, moderate skin and respiratory irritation with possible damage. Skin effects may be delayed for hours. This material is toxic to fish. Avoid contamination of streams and sewers.

OSHA REGULATORY STATUS
This material is classified as hazardous under OSHA regulations

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY
Ingestion, skin contact, skin absorption, eyes, inhalation

ACUTE EFFECTS

INGESTION
May be harmful if swallowed.
Direct contact may cause moderate skin irritation with possible damage. Skin irritation effects may be delayed for hours.

SKIN
May cause skin sensitization.

EYE CONTACT
Contact may cause severe eye irritation and damage to the eye if not removed promptly.

INHALATION
Exposure to vapor or mist is possible and may cause respiratory irritation with possible lung damage.

CHRONIC EFFECTS
There are no known chronic effects.

TARGET ORGANS
Immune system (sensitizer)

CARCINOGENICITY
This product (or component) is not listed as a carcinogen according to OSHA, NTP, IARC, and ACGIH.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
There are no known conditions aggravated by exposure to this product.

POTENTIAL ENVIRONMENTAL EFFECTS
This product is toxic to fish. May cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The listed components are considered to be hazardous based on OSHA’s Hazard Communication Standard. For further regulatory information, see Section 15.

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Bromo-2-nitro-1,3-propanediol</td>
<td>52-51-7</td>
<td>6-8</td>
</tr>
<tr>
<td>Nitrate compound</td>
<td>Proprietary</td>
<td>&lt;2</td>
</tr>
<tr>
<td>5-Chloro-2-methyl-4-isothiazolin-3-one</td>
<td>26172-55-4</td>
<td>0.5-1</td>
</tr>
<tr>
<td>2-Methyl-4-isothiazolin-3-one</td>
<td>2682-20-4</td>
<td>0.2-0.4</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

INGESTION
Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

SKIN CONTACT
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

EYE CONTACT
Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

INHALATION
Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN
Probable mucosal damage may contraindicate use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
Nonflammable

FIRE EXTINGUISHING MEDIA
Suitable extinguishing media - Extinguish using agent suitable for surrounding fire.

PROTECTION OF FIREFIGHTERS
Specific hazards arising from the chemical:
- Thermal decomposition may release the following hazardous substances: Nitrogen oxides, hydrobromic acid, and bromine.
- Contact may cause burns to skin and eyes. Runoff from fire control or dilution water may cause pollution.

Protective equipment and precautions for firefighters:
- Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Avoid breathing vapors, keep upwind. Positive pressure self-contained breathing apparatus with full facepiece and structural firefighters' protective clothing will provide limited protection.

6. ACCIDENTAL RELEASE MEASURES

Keep unnecessary people away; isolate hazard area and deny entry. Wear protective equipment as specified in Section 8. Stay upwind; keep out of low areas. Positive pressure self-contained breathing apparatus and structural firefighters' protective clothing will provide limited protection. Stop leak if you can do it without risk. For small spills, absorb with vermiculite or other nonflammable absorbent material and place into containers for later disposal. For large spills, dike far ahead of liquid spill for later disposal. Deactivation procedures must be followed prior to cleanup. If water pollution occurs, notify the appropriate authorities.

Request "Risk Management & Responsible Care Guidelines for TroyCare BC02 and BC03" for more detailed cleanup and deactivation procedures.

Observe all Federal, State, and Local regulations regarding notifications of accidental releases.
SAFETY DATA SHEET (SDS)

7. HANDLING & STORAGE
Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or mist. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Store away from incompatible substances in a cool, dry, ventilated area. Do not contaminate water, food, or feed by storage or disposal.

Request "Risk Management & Responsible Care Guidelines for TroyCare BC02 and BC03" for more detailed safe handling information.

Observe all Federal, State, and Local regulations when storing or disposing of this substance.

8. PERSONAL PROTECTION/EXPOSURE CONTROLS

9. PHYSICAL AND CHEMICAL PROPERTIES

10. STABILITY & REACTIVITY

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

ECOTOXICITY
This product is toxic to terrestrial and aquatic plants, fish, and aquatic invertebrates. Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwaters.

Data on 2-Bromo-2-nitro-1,3-propanediol, is as follows:
- LC50 (rainbow trout, 96 hr flow-through) - 41.2 mg/L.
- EC50 (daphnia magna, 48 hr) - 1.4 mg/L.
- EC50 (algae, 72 hr static) - 0.4-2.8 mg/L.

Data on 5-chloro-2-methyl-4-isothiazolin-3-one/2-methyl-4-isothiazolin-3-one, is as follows:
- LC50 (bluegill sunfish, 96 hr flow-through) - 280 μg/L.
- LC50 (rainbow trout, 96 hr flow-through) - 190 μg/L.
- EC50 (daphnia magna, 48 hr) - 160 μg/L.

ENVIRONMENTAL FATE
This product may cause adverse environmental impact. Avoid contamination of streams and sewers.

2-Bromo-2-nitro-1,3-propanediol has a low potential to bioaccumulate.
COD: 0.6gO₂/g.
Octanol/water partition coefficient: LogP₀/w = 0.18

Data on 5-chloro-2-methyl-4-isothiazolin-3-one/2-methyl-4-isothiazolin-3-one, is as follows:
Octanol/water partition coefficient: LogP₀/w = 0.401
Biodegradation (aquatic metabolism): 1/12 anaerobic - 4.8 hr.
Biodegradation (aquatic metabolism): 1/12 aerobic - 17.3 hr.
This product is not a RCRA hazardous waste by definition. The user of this material has the responsibility to dispose of unused material, residues, and containers in compliance with all Federal, State, and Local Regulations.

### TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>DOT</th>
<th>SHIPPING NAME</th>
<th>UN3265, Corrosive liquid, acidic, organic, n.o.s. (contains: isothiazolinones, 2-Bromo-2-nitro-1,3-propanediol), 8, PG II, Marine pollutant, EMS# F-A, S-B</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA</td>
<td>SHIPPING NAME</td>
<td>UN3265, Corrosive liquid, acidic, organic, n.o.s. (contains: isothiazolinones, 2-Bromo-2-nitro-1,3-propanediol), 8, PG II, ERG# 8L</td>
</tr>
<tr>
<td>IMDG</td>
<td>SHIPPING NAME</td>
<td>UN3265, Corrosive liquid, acidic, organic, n.o.s. (contains: isothiazolinones, 2-Bromo-2-nitro-1,3-propanediol), 8, PG II, Marine pollutant, EMS# F-A, S-B</td>
</tr>
</tbody>
</table>

### REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>CERCLA SECTION 103 (40CFR302.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This product does not contain any chemicals that are reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SARA SECTION 302 (40CFR355.30), SARA SECTION 304 (40CFR355.40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This product does not contain any chemicals that require emergency planning based on Threshold Planning Quantities (TPQ) or release reporting based on Reportable Quantities (RQ).</td>
</tr>
</tbody>
</table>

### SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21)

<table>
<thead>
<tr>
<th>ACUTE</th>
<th>CHRONIC</th>
<th>FIRE</th>
<th>REACTIVE</th>
<th>PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CALIFORNIA PROPOSITION 65

This product does not contain any substances that are currently on the list of Known Carcinogens and Reproductive Toxins, at levels which would require a warning under the statute.

### STATE RIGHT-TO-KNOW

For additional information on components that require listing for compliance with State Right-to-Know regulations, contact Troy Corporation.

### OTHER

This SDS has been revised in the following sections: (revisions indicated in left border)  
Sect. 9 (Transportation Information)

<table>
<thead>
<tr>
<th>ABBREVIATIONS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNOC - Particulates not otherwise classified</td>
<td>STEL - Short-term exposure limit</td>
</tr>
<tr>
<td>PNOR - Particulates not otherwise regulated</td>
<td>TLV - Threshold limit value</td>
</tr>
<tr>
<td>PNOC - Particulates not otherwise classified</td>
<td>TWA - Time-weighted average</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS RATING</th>
<th>NFPA RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>FLAMMABILITY</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>