**SAFETY DATA SHEET (SDS)**

**1. PRODUCT & COMPANY IDENTIFICATION**

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>MANUFACTURER</th>
<th>MANUFACTURER ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TroyCare™ FL10</td>
<td>Troy Chemical Corporation</td>
<td>1 Avenue L, Newark, N.J. 07105</td>
</tr>
</tbody>
</table>

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

TroyCare™ FL10 is a clear yellow liquid with a characteristic odor. May cause eye and skin irritation. May evolve iodine vapors during combustion.

Toxic to aquatic organisms.

**OSHA REGULATORY STATUS**

This material is classified as hazardous under OSHA regulations.

**POTENTIAL HEALTH EFFECTS**

**ROUTES OF ENTRY**

- Ingestion, skin contact, eyes, inhalation

**ACUTE EFFECTS**

- **INGESTION**
  - May be harmful if ingested.

- **SKIN**
  - May cause skin irritation.

- **EYE CONTACT**
  - May cause eye irritation.

- **INHALATION**
  - May be harmful if inhaled.

**CHRONIC EFFECTS**

None

**TARGET ORGANS**

None

**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 aquatic organisms. See Section 12 for additional information.

**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>
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</thead>
<tbody>
<tr>
<td>3-iodo-2-propynyl butyl carbamate</td>
<td>55406-53-6</td>
<td>10</td>
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</table>

**4. FIRST AID MEASURES**

**INGESTION**

Call 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**

Rinse skin immediately with plenty of water for 15-20 minutes. If irritation or redness persists, 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 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

**INHALATION**

If respiratory symptoms develop, remove from exposure area to fresh air immediately. If breathing is difficult, oxygen should be administered by qualified personnel. If symptoms persist, call a poison control center or doctor for further treatment advice.

**NOTES TO PHYSICIAN**

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**

- Combustible liquid - Class III B

**FIRE EXTINGUISHING MEDIA**

- Suitable extinguishing media - Dry chemical, carbon dioxide, water spray, or regular foam
- Unsuitable extinguishing media - Water jet

**PROTECTION OF FIREFIGHTERS**

Specific hazards arising from the chemical:

- Thermal decomposition may release the following hazardous substances
  - Carbon monoxide, carbon dioxide, iodine vapors, toxic and/or irritating compounds

- Runoff from fire control or dilution water may cause pollution. May evolve vapors of iodine.

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 facemask and structural firefighters' protective clothing will provide limited protection.

**6. ACCIDENTAL RELEASE MEASURES**

Keep unnecessary people away from spill area. Wear protective equipment as specified in Section 8. Stop leak if you can do it without risk. If spilled, floors may become slippery. For small spills, absorb with vermiculite or other noncombustible absorbent material and place into containers for later disposal. For large spills, dike far ahead of liquid spill for later disposal. If water pollution occurs, notify the appropriate authorities.

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

TROY CORPORATION
8 Vreeland Road
Florham Park, NJ 07932
USA

FOR SDS INFORMATION: 1-973-589-2500 (USA)
CHEMTREC 1-703-527-3887 (USA)

TroyCare™ FL10
Product Code: 20015
Effective Date: January 17, 2014
Replaces: December 20, 2013

7. HANDLING & STORAGE
Avoid contact with eyes, skin, 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 store at temperatures below 32°F (0°C). Do not contaminate water, food, or feed by storage or disposal.

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

8. PERSONAL PROTECTION/EXPOSURE CONTROLS

EXPOSURE GUIDELINES
None established

VENTILATION
Provide adequate ventilation or local exhaust to minimize exposure.

EYE/FACE PROTECTION
If potential for contact with material exists, use safety glasses with sideshields or other approved eye protection.

SKIN PROTECTION
Wear impervious gloves and apron to prevent skin contact. Wear impermeable suit if exposure is possible to a large portion of the body.

RESPIRATORY PROTECTION
Whenever workplace conditions warrant the use of a respirator, a respiratory protection program meeting OSHA 1910.134 must be followed utilizing a NIOSH/MSHA-approved respirator.

OTHER
Eyewash and safety shower should be available within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Clear yellow liquid

SPECIFIC GRAVITY AT 25°C. (Water=1) 1.05 (typ)

ODOR
Characteristic odor

WATER SOLUBILITY
Forms an emulsion

pH (1% aqueous solution) 6.6

AUTOIGNITION TEMPERATURE
Not determined

MELTING/FREEZING POINT
<4°C (<40°F)

DECOMPOSITION TEMPERATURE
Not determined

INITIAL BOILING POINT
Not determined

VISCOSITY (Gardner) AT 25°C.
Not determined

FLASH POINT (ASTM D3278-96)
(Setaflash Closed cup) >110°C (>230°F)

% VOLATILES BY WEIGHT
<1%

VAPOUR PRESSURE AT 20°C.
Not determined

EVAPORATION RATE (Butyl acetate=1)
<1

VAPOUR DENSITY (Air=1)
>1

FLAMMABLE LIMITS
Not determined

10. STABILITY & REACTIVITY

REACTION
Stable under normal temperatures and pressures.

CONDITIONS TO AVOID
Avoid excessive heat, exposure to sunlight.

INCOMPATIBILITY
Avoid contact with strong acids (pH <2), bases (pH >10), and moisture.

HAZARDOUS DECOMPOSITION
Decomposition may release carbon monoxide, carbon dioxide, iodine vapors, and other toxic and/or irritating compounds.

HAZARDOUS POLYMERIZATION
Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

No data is available on this product, however, toxicological data is included on the hazardous ingredients. For additional information, contact Troy Corporation:

ACUTE ORAL EFFECTS
IPBC: LD50 (oral, rat-female) - 1056 mg/kg.; LD50 (oral, rat-male) - 1795 mg/kg.

ACUTE SKIN EFFECTS
IPBC: LD50 (dermal, rabbit) >2000 mg/kg., slight irritant.

ACUTE EYE EFFECTS
IPBC: Severe irritation and corrosive (rabbit). The corrosion is completely reversible and the irritation is markedly reduced by the irrigation of the eyes with water 20-30 seconds after exposure to test sample.

ACUTE INHALATION EFFECTS
IPBC: LC50 (rat,4 hr) - 680 mg/m3.

SUBCHRONIC EFFECTS AND OTHER STUDIES
For additional information on ingredients, contact Troy Corporation.

12. ECOLOGICAL INFORMATION

Ecotoxicological data is included on hazardous ingredients. For additional information, contact Troy Corporation:

ECOTOXICITY
This product is toxic to aquatic organisms. Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwaters.

Data on 3-iodo-2-propynyl butyl carbamate (IPBC) is as follows:
LC50 (rainbow trout, 96 hr flow-through) - 67 μg/L.
EC50 (daphnia magna, 48 hr) - 0.16 mg/L.
EC50 (Scenedesmus subspicatus, 72 hr) - 22 μg/L.

ENVIRONMENTAL FATE
The fate of IPBC is quite favorable. Degradation is rapid and occurs through biological as well as non-biological processes. Classified as readily biodegradable. Low potential to bioaccumulate.

Octanol/water partition coefficient: LogP ow = 2.81
COD: 1148 mg/g.

13. DISPOSAL INFORMATION

RCRA HAZARDOUS WASTE
This product is not a RCRA hazardous waste by definition.

WASTE DISPOSAL PROCEDURE
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.
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8 Vreeland Road
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TroyCare™ FL10
Product Code: 20015
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14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>DOT SHIPPIING NAME</th>
<th>UN3082 Environmentally hazardous substance, liquid n.o.s. (contains: 3-iodo-2-propynyl butyl carbamate) 9, PG III, Marine Pollutant, ERG# 171</th>
</tr>
</thead>
<tbody>
<tr>
<td>LABELS REQUIRED</td>
<td>Note: While this product is considered hazardous for transport according to IMDG and IATA regulations, it is not regulated when transported in non-bulk containers as per DOT (49CFR 171.4(c))</td>
</tr>
<tr>
<td>IATA SHIPPING NAME</td>
<td>UN3082, Environmentally hazardous substance, liquid n.o.s. (contains: 3-iodo-2-propynyl butyl carbamate) 9 PG III, ERG# 9L</td>
</tr>
<tr>
<td>LABELS REQUIRED</td>
<td>Class 9, (Environmentally Hazardous - contents greater 5 L)</td>
</tr>
<tr>
<td>IMDG SHIPPING NAME</td>
<td>UN3082, Environmentally hazardous substance, liquid n.o.s. (contains: 3-iodo-2-propynyl butyl carbamate) 9, PG III, Marine Pollutant, EMS# F-A, S-F</td>
</tr>
<tr>
<td>LABELS REQUIRED</td>
<td>Class 9, Marine Pollutant</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

CERCLA SECTION 103 (40CFR302.4)
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).

SARA SECTION 302 (40CFR355.30), SARA SECTION 304 (40CFR355.40)
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).

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>
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SARA SECTIONS 313 (40CFR372.65)
This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986. This information must be included in all SDS’s that are copied and distributed for this material.

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<thead>
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CHEMICAL INVENTORIES
The ingredients of this product are all on the following Chemical Substance Inventories, are exempt from the Inventories, or are otherwise compliant with inventory requirements of the governing agency.

<table>
<thead>
<tr>
<th>TSCA</th>
<th>EINECS</th>
<th>DSL</th>
<th>AICS</th>
<th>ECL</th>
<th>MITI,ENCs</th>
<th>PICCS</th>
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<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Europe</th>
<th>Canada</th>
<th>Australia</th>
<th>Korea</th>
<th>Japan</th>
<th>Philippines</th>
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<tbody>
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<table>
<thead>
<tr>
<th>IECSC</th>
<th>NZIoC</th>
<th>NECI</th>
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<tr>
<td>X</td>
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<table>
<thead>
<tr>
<th>China</th>
<th>New Zealand</th>
<th>Taiwan</th>
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<tr>
<td>X</td>
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</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.

16. OTHER

REVISIONS Prepared by: Environmental and Regulatory Affairs Dept.
This SDS has been revised in the following sections: (revisions indicated in left border) Sect. 2 (Emergency Overview), Sect. 9 (Appearance)

ABBREVIATIONS

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

HMIS RATING

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>H</td>
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</table>

NFPA RATING

<table>
<thead>
<tr>
<th>HEALTH</th>
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<tr>
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<td>0</td>
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LAST PAGE