## 1. PRODUCT & COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>TroyCare™ FP12</th>
<th>MANUFACTURER</th>
<th>Troy Chemical Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMICAL NAME</td>
<td>Not applicable</td>
<td>CHEMICAL FAMILY</td>
<td>Not applicable</td>
</tr>
<tr>
<td>FORMULA</td>
<td>Proprietary</td>
<td>SYNONYMS</td>
<td>None</td>
</tr>
</tbody>
</table>

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW
TroyCare™ FP12 is a free-flowing white to off-white powder with a mild characteristic odor. May cause slight eye and skin irritation. May evolve iodine vapors during combustion. Toxic to aquatic organisms.

### OSHA REGULATORY STATUS
While this material is not classified as hazardous under OSHA regulations, this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

### POTENTIAL HEALTH EFFECTS

#### ROUTES OF ENTRY
- Ingestion, skin contact, eyes, inhalation

#### ACUTE EFFECTS

- **INGESTION**: Low acute oral toxicity
- **SKIN**: Direct contact may cause slight skin irritation.
- **EYE CONTACT**: Direct contact may cause mild eye irritation.
- **INHALATION**: None
- **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
May aggravate pre-existing skin disorders and allergies.

### POTENTIAL ENVIRONMENTAL EFFECTS
This product is toxic to aquatic organisms. See Section 12 for additional information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### CHEMICAL NAME | CAS# | %
--- | --- | ---
3-iodo-2-propynyl butyl carbamate | 55406-53-6 | 12

## 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 with plenty of water for several 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 the first 5 minutes, then continue rinsing eye. If symptoms persist, 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
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
This material may burn but does not ignite readily.

### FIRE EXTINGUISHING MEDIA
- Suitable extinguishing media - Dry chemical, carbon dioxide, water spray, or regular foam. Extinguish using agent suitable for surrounding fire.
- 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.
  - 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 facepiece 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. For small dry spills, shovel material into clean, dry container and cover loosely; move containers from spill area. For large dry spill, cover spill with plastic sheet or tarp to minimize spreading or, if wet, 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
FOR SDS INFORMATION: (973) 589-2500
24 HOUR EMERGENCY PHONE NUMBER
CHEMTREC 1-800-424-9300

TroyCare™ FP12
Product Code: 10535
Effective Date: January 17, 2014
Replaces: December 23, 2013

7. HANDLING & STORAGE

Avoid contact with eyes, skin, or clothing. Avoid breathing dust. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Avoid breakage of bagged material or spills of bulk material. Store away from incompatible substances in a cool, dry, ventilated area. Protect from moisture. 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 May cause mild eye irritation. If potential for contact with material exists, use safety glasses with sideshields or other approved eye protection.
SKIN PROTECTION Direct contact may cause slight skin irritation. Wear impervious gloves and apron to prevent skin contact.
RESPIRATORY PROTECTION Respiratory protection is not normally required however 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 should be available within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White to off-white powder
ODOR Mild characteristic odor
pH (1% aqueous solution) 5.5-6.5
MELTING/FREEZING POINT >200°C (>392°F)
INITIAL BOILING POINT Not applicable
FLASH POINT (ASTM D3278-96) (Setaflash Closed cup) Not applicable
EVAPORATION RATE (Butyl acetate=1) Not applicable
FLAMMABLE LIMITS Not applicable

10. STABILITY & REACTIVITY

REACTIVITY 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 oxidizing agents.
Hazardous Decomposition Decomposition may release carbon monoxide, carbon dioxide, and iodine vapors.
Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL EFFECTS LD50 (oral, rat) - 3129 mg/kg.

ACUTE SKIN EFFECTS LD50 (dermal, rabbit) >5000 mg/kg.; Slight skin irritation (rabbit). This product is not a skin sensitizer.

ACUTE EYE EFFECTS Mild eye irritation (rabbit).

ACUTE INHALATION EFFECTS LC50 (rat,4 hr) > 2.05 mg/L.

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

12. ECOCLOGICAL INFORMATION

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: LogPow = 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.

14. TRANSPORTATION INFORMATION

DOT SHIPPING NAME UN3077 Environmentally hazardous substance, solid n.o.s. (contains: 3-iodo-2-propynyl butyl carbamate)
9, PG III, Marine Pollutant, ERG# 171

LABELS REQUIRED Class 9, Marine Pollutant

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)).
SAFETY DATA SHEET (SDS)

TROY CORPORATION
8 Vreeland Road
Florham Park, NJ 07932

FOR SDS INFORMATION: (973) 589-2500
24 HOUR EMERGENCY PHONE NUMBER: CHEMTREC 1-800-424-9300

TroyCare™ FP12
Product Code: 10535
Effective Date: January 17, 2014
Replaces: December 23, 2013

IATA SHIPING NAME
UN3077, Environmentally hazardous substance, solid n.o.s. (contains: 3-iodo-2-propynyl butyl carbamate)
9 PG III, ERG# 9L

LABELS REQUIRED
Class 9, (Environmentally Hazardous - contents greater 5 Kg)

IMDG SHIPING NAME
UN3077, Environmentally hazardous substance, solid n.o.s. (contains: 3-iodo-2-propynyl butyl carbamate)
9, PG III, Marine Pollutant, EMS# F-A, S-F

LABELS REQUIRED
Class 9, Marine Pollutant

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>
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<tr>
<th>ACUTE</th>
<th>CHRONIC</th>
<th>FIRE</th>
<th>REACTIVE</th>
<th>PRESSURE</th>
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SARA SECTION 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.

<table>
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<td>55406-53-6</td>
<td>12</td>
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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.

TSCA | EINECS | DSL/NDSDL | AICS | ECL | MITI,ENCS | PICCS |
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<tr>
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<td>Canada</td>
<td>Australia</td>
<td>Korea</td>
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<td>Philippines</td>
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IECSC | NZIoC | NECI | China | New Zealand | Taiwan |
|------|-------|------|-------|-------------|--------|

CALIFORNIA PROPOSITION 65
This product contains propylene oxide which is known by the State of California to cause cancer.

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. 9 (pH, Water Solubility).

ABBREVIATIONS

PNOC - Particulates not otherwise classified
PNOR - Particulates not otherwise regulated
STEL - Short-term exposure limit
TLV - Threshold limit value
TWA - Time-weighted average

HMIS RATING

<table>
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<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
<th>PERSONAL PROTECTION</th>
<th>HEALTH</th>
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The information contained in this SDS is believed to be accurate and reliable as of issue date, but no representation, guarantee, or warranty, express or implied is made to the accuracy, reliability, or completeness of the information. It is provided for the purpose of complying with hazard communication regulations. It is not intended as performance information or specifications for the product. It is the user's responsibility to determine the suitability of the product for his own use. Troy does not assume legal responsibility for reliance on information herein.

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