1. PRODUCT & COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>MANUFACTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>TroyCare™ BD55</td>
<td>Troy Chemical Corporation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CHEMICAL FAMILY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-bis(hydroxymethyl)-5,5-dimethylhydantoin</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FORMULA</th>
<th>SYNONYMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>C7 H12 N2 O4</td>
<td>1,3-bis(hydroxymethyl)-5,5-dimethyl-2,4-imidazolidinedione; 1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

TroyCare® BD55 is a colorless clear liquid with a slightly pungent odor. May cause eye and skin irritation. Excessive heat in excess of 90°C. (194°F.) will result in decomposition to formaldehyde. Avoid contamination of streams and sewers. Floors may become slippery in the event of a spill.

OSHA REGULATORY STATUS

This material is classified as hazardous under OSHA regulations.

POTENTIAL HEALTH EFFECTS

<table>
<thead>
<tr>
<th>ROUTES OF ENTRY</th>
<th>ACUTE EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion, skin contact, eyes, inhalation</td>
<td>Ingestion: Ingestion may cause gastrointestinal irritation.</td>
</tr>
<tr>
<td></td>
<td>Skin: Direct contact may cause skin irritation.</td>
</tr>
<tr>
<td></td>
<td>Eye Contact: Direct contact may cause eye irritation.</td>
</tr>
<tr>
<td></td>
<td>Inhalation: Breathing small amounts during normal handling may cause mild reversible respiratory irritation.</td>
</tr>
<tr>
<td></td>
<td>Chronic Effects: Frequent or prolonged exposure to formaldehyde may cause hypersensitivity leading to contact dermatitis. Repeated or prolonged skin contact with formaldehyde may cause an allergic reaction in some people.</td>
</tr>
<tr>
<td></td>
<td>Target Organs: Immune system (sensitizer), nasopharyngeal cavity.</td>
</tr>
<tr>
<td></td>
<td>Carcinogenicity: Formaldehyde is listed as a carcinogen according to OSHA (specifically regulated carcinogen), NTP (anticipated carcinogen - as formaldehyde gas), IARC (Group 1 - known carcinogen), and ACGIH (suspected carcinogen).</td>
</tr>
</tbody>
</table>

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May aggravate respiratory and skin disorders and allergies. May cause allergic sensitization reactions in persons with pre-existing sensitivity to formaldehyde.

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>DMMD Hydantoin</td>
<td>Mixture (No CAS #)</td>
<td>54-56</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>&lt;1.5%</td>
</tr>
</tbody>
</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
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 further 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
None

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 IIIIB
This material may burn but does not ignite readily. Runoff from fire control or dilution water may cause pollution.

FIRE EXTINGUISHING MEDIA

Suitable extinguishing media - Dry chemical, carbon dioxide, water spray, or regular foam.

Protection of Firefighters

Thermal decomposition may release the following hazardous substances
Carbon monoxide, carbon dioxide, nitrogen oxides and formaldehyde.

Excessive heat in excess of 90°C. (194°F.) will result in decomposition to formaldehyde.

Protective equipment and precautions for firefighters:
Move container from fire 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. Firefighters should use self-contained breathing apparatus with full facepiece.
SAFETY DATA SHEET (SDS)

6. ACCIDENTAL RELEASE MEASURES

Caution! Floors may become slippery. Keep unnecessary people away; isolate hazard area and deny entry. Wear protective equipment as specified in Section 8. Stop leak if you can do it without risk. Warning! When spilled and liquid spreads over a large area, irritating levels of formaldehyde may be produced. 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.

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 indoors at temperatures between 15-40°C (59-104°F). Avoid storing below 15°C. (59°F.) to prevent crystallization. Keep from freezing. Store away from incompatible substances. Do not store near food or feed.

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

8. PERSONAL PROTECTION/EXPOSURE CONTROLS

- **EXPOSURE GUIDELINES**
  - Formaldehyde
    - TWA: 0.75 ppm; STEL - 2 ppm, Action level - 0.5 ppm (OSHA)
    - TWA: 0.3 ppm (ACGIH)
  - Autoignition Temperature: Not determined
  - % Volatiles by Weight: 45% (typical)
  - Vapor Pressure at 20°C: Not determined
  - Flash Point: 2°C (36°F) (ASTM D3278-96)
  - Setaflash Closed cup: >100°C (212°F)
  - Evaporation Rate (Butyl acetate=1): <1
  - Flammable Limits: Not determined

- **VENTILATION**
  - Provide adequate ventilation or local exhaust to meet established exposure limits.

- **EYE/FACE PROTECTION**
  - Direct contact may cause slight skin irritation. Wear impervious gloves and apron to prevent skin contact. Wear impermeable suit if exposure is possible to a large portion of the body.

- **SKIN PROTECTION**
  - A respirator should be used based on exposure levels found in the workplace.

- **RESPIRATORY PROTECTION**
  - A respiratory protection program meeting OSHA 1910.134 must be followed whenever workplace conditions warrant the use of a respirator. If exposure may exceed recommended limits, a NIOSH/MSHA-approved respirator should be used based on exposure levels found in the workplace.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

- **APPEARANCE**
  - Colorless clear liquid
- **SPECIFIC GRAVITY AT 25°C (Water=1)**: 1.16 (typ)
- **ODOR**
  - Slightly pungent odor
- **pH AT 20°C**
  - 6.5 - 7.5
- **MEETING/FREEZING POINT**
  - 2°C (36°F)
- **INITIAL BOILING POINT**
  - Not determined
- **FLASH POINT (ASTM D3278-96)**
  - (Setaflash Closed cup): >100°C (212°F)
- **EVAPORATION RATE (Butyl acetate=1)**
  - <1
- **FLAMMABLE LIMITS**
  - Not determined
- **WATER SOLUBILITY**
  - Soluble
- **DECOMPOSITION TEMPERATURE**
  - Not determined
- **VISCOSITY (Brookfield LV) AT 25°C**
  - Not determined
- **% VOLATILES BY WEIGHT**
  - 45% (typical)
- **VAPOR PRESSURE AT 20°C**
  - Not determined
- **VAPOR DENSITY (Air=1)**
  - Not applicable
- **DECOMPOSITION TEMPERATURE**
  - Not determined
- **PH 20°C**
  - 6.5 - 7.5
- **DECOMPOSITION TEMPERATURE**
  - Not determined
- **VISCOSITY (Brookfield LV) AT 25°C**
  - Not determined
- **% VOLATILES BY WEIGHT**
  - 45% (typical)
- **VAPOR PRESSURE AT 20°C**
  - Not determined
- **VAPOR DENSITY (Air=1)**
  - Not applicable

10. STABILITY & REACTIVITY

- **REACTIVITY**
  - Stable under normal temperatures and pressures.
- **CONDITIONS TO AVOID**
  - Avoid temperatures above 90°C (194°F).
- **HAZARDOUS DECOMPOSITION**
  - Decomposition may release carbon monoxide, carbon dioxide, nitrogen oxides, and organic vapors/fumes of formaldehyde.
- **HAZARDOUS POLYMERIZATION**
  - Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

- **ACUTE ORAL EFFECTS**
  - LD50 (oral, rat) - 3300 mg/kg
- **ACUTE SKIN EFFECTS**
  - Mild irritation
- **ACUTE EYE EFFECTS**
  - Mild irritation (rabbit).
- **ACUTE INHALATION EFFECTS**
  - LC50 (rat, 4 hr) > 5 mg/L.

12. ECOLOGICAL INFORMATION

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

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, IATA, IMDG
This product does not meet the definition of any hazard class and therefore is not subject to DOT, IATA, and IMDG Regulations.

15. REGULATORY INFORMATION

CERCLA SECTION 103 (40CFR302.4)
This product contains the following toxic chemicals that require notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the Reportable Quantities (RQ).

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
<th>RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>1.5 max</td>
<td>100# RQ</td>
</tr>
</tbody>
</table>

SARA SECTION 302 (40CFR355.30), SARA SECTION 304 (40CFR355.40)
This product contains the following toxic chemicals that require emergency planning based on Threshold Planning Quantities (TPQ) and release reporting based on Reportable Quantities (RQ).

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
<th>RQ (lbs)</th>
<th>TPQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>1.5 max</td>
<td>100# RQ</td>
<td>500# TPQ</td>
</tr>
</tbody>
</table>

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

ACUTE CHRONIC FIRE REACTIVE PRESSURE

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>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
<th>RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>1.5 max</td>
<td>100# RQ</td>
</tr>
</tbody>
</table>

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>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</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>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
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<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IECSC</th>
<th>NZIoC</th>
<th>NECI</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>China</th>
<th>New Zealand</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</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.

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. 7 (Handling & Storage), Sect. 10 (Incompatibility)

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

<table>
<thead>
<tr>
<th>NFPA RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
</tr>
<tr>
<td>2*</td>
</tr>
</tbody>
</table>

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