**SAFETY DATA SHEET.**

**Issuing date** 26-May-2015  
**Revision Date** 26-May-2015  
**Version** 1

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

<table>
<thead>
<tr>
<th>Product name</th>
<th>#93 BATTERY TERMINAL CLEANER</th>
</tr>
</thead>
</table>

**Recommended use of the chemical and restrictions on use**

<table>
<thead>
<tr>
<th>Product code</th>
<th>F00943</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Type</td>
<td>Extremely flammable aerosol</td>
</tr>
<tr>
<td>Synonyms</td>
<td>None</td>
</tr>
</tbody>
</table>

**Supplier's details**

<table>
<thead>
<tr>
<th>Recommended Use</th>
<th>Battery Cleaner.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses advised against</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Manufactured For:**

1st Ayd Corporation  
1325 Gateway Drive  
Elgin, IL 60124

**Emergency telephone number**

<table>
<thead>
<tr>
<th>Chemical Emergency Phone Number</th>
<th>800-255-3924</th>
</tr>
</thead>
</table>
2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Flammable aerosols</th>
<th>Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gases under pressure</td>
<td>Compressed Gas</td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements.

Emergency Overview

DANGER

Hazard Statements

Extremely flammable aerosol
Contains gas under pressure; may explode if heated

Appearance Clear Physical state Aerosol Odor Mild

Precautionary Statements - Prevention
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Storage
Protect from sunlight. Store in a well-ventilated place
Do not expose to temperatures exceeding 122°F (50°C)

Hazards not otherwise classified (HNOC)

None

Other information

0.0217% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPAINE/ISOBUTANE/N-BUTANE</td>
<td>68476-86-8</td>
<td>10-20</td>
</tr>
<tr>
<td>TRIETHANOLAMINE</td>
<td>102-71-6</td>
<td>1-10</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES
First aid measures for different exposure routes

**Eye contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin contact**
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

**Inhalation**
Move to fresh air. If breathing is difficult, give oxygen. Artificial respiration and/or oxygen may be necessary. If breathing has stopped, contact emergency medical services immediately.

**Ingestion**
Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Center immediately.

**Most important symptoms/effects, acute and delayed**

**Main Symptoms**
May cause skin and eye irritation.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**
Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

**Specific hazards arising from the chemical**
No information available.

**Explosion Data**
- Sensitivity to Static Discharge: none.

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Absorb with sand, clay, or other suitable material. Hard surfaces may be mopped with water. Remove all sources of ignition. Avoid contact with the skin and the eyes. Evacuate personnel to be safe areas. Keep people away from and upwind of spill/leak. Contents under pressure. Do not puncture or incinerate cans. Wear protective gloves/clothing and eye/face protection.

**Environmental precautions**
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

**Methods and materials for containment and cleaning up**
Methods for Containment
Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions
Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products
Strong acids, alkalis, or oxidizing agents.

Aerosol Level
1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPANE/ISOBUTANE/N-BUTANE</td>
<td>74-98-6: TWA: 1000 ppm</td>
<td>74-98-6: TWA: 1000 ppm TWA: 1800 mg/m³</td>
<td>74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m³</td>
</tr>
<tr>
<td>58476-88-8</td>
<td>106-97-8: STEL: 1000 ppm</td>
<td>(vacated) TWA: 1900 mg/m³</td>
<td>106-97-8: TWA: 800 ppm TWA: 1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td>75-28-5: STEL: 1000 ppm</td>
<td>106-97-8: (vacated) TWA: 800 ppm</td>
<td>75-28-5: TWA: 800 ppm TWA: 1900 mg/m³</td>
</tr>
<tr>
<td>TRIETHANOLAMINE</td>
<td>TWA: 5 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

ACGIH: (American Conference of Governmental Industrial Hygienists)
OSHA: (Occupational Safety & Health Administration)
NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures
Shower
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety glasses with side-shields.

Skin and body protection
Chemical resistant apron. Protective gloves.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Aerosol</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td>Odor</td>
</tr>
<tr>
<td>Color</td>
<td>amber</td>
<td>Odor Threshold</td>
</tr>
<tr>
<td>pH</td>
<td>8.95</td>
<td></td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>-91 °C / -132 °F</td>
<td>Based on propellant</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>.986</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Practically insoluble</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

Other information

VOC Content(%) 14.06

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Strong acids, alkalis, or oxidizing agents.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Inhalation
Avoid breathing vapors or mists.

Eye contact
Avoid contact with eyes.

Skin contact
Avoid contact with skin.

Ingestion
May be harmful or fatal if swallowed.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (rat)</th>
<th>LD50 Dermal (rabbit)</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE 102-71-6</td>
<td>4190 mg/kg</td>
<td>&gt; 20 mL/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
May cause mild irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
None known.

Germ Cell Mutagenicity
None known.

Carcinogenicity
The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE 102-71-6</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

ACGIH: (American Conference of Governmental industrial Hygienists)
A3 - Animal Carcinogen
IARC: (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity
This product does not contain any known or suspected reproductive hazards.

Specific target organ systemic toxicity (single exposure)
None under normal use conditions.

Specific target organ systemic toxicity (repeated exposure)
None under normal use conditions.

Neurological effects
Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

Aspiration hazard
Not applicable.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
0.0217% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE 102-71-6</td>
<td>216 mg/L EC50 Desmodesmus subspicatus 72h 169 mg/L EC50 Desmodesmus subspicatus 96h</td>
<td>10600 - 13000 mg/L LC50 Pimephales promelas 96h flow-through 450 - 1000 mg/L LC50 Lepomis macrochirus 96h static 1000 mg/L LC50 Pimephales promelas 96h static</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Persistence and degradability
No information available.

Bioaccumulation
No information available.
<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPANE/ISOBUTANE/N-BUTANE</td>
<td>68476-86-8</td>
</tr>
<tr>
<td>TRIETHANOLAMINE</td>
<td>102-71-6</td>
</tr>
</tbody>
</table>

Other adverse effects: No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment**

**Waste Disposal Methods**
This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging**
Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

**DOT Ground**
CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

**IATA**
UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

**IMDG**
UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

### 15. REGULATORY INFORMATION

#### International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPANE/ISOBUTANE/N-BUTANE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Not listed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TRIETHANOLAMINE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Legend:**

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **CHINA** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

#### U.S. Federal Regulations

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
SARA 311/312 Hazard Categories
- Acute Health Hazard: no
- Chronic Health Hazard: no
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: Yes
- Reactive Hazard: no

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

U.S. State Regulations

California Proposition 65
This product does not contain any known Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE 102-71-6</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

EPA Pesticide Registration Number  Not applicable

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>B</td>
</tr>
</tbody>
</table>

Prepared By Regulatory Affairs
Issuing date 26-May-2015
Revision Date 26-May-2015
Revision Note No information available

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet