MATERIAL SAFETY DATA SHEET
DEKA Battery Cleaner

Section 1: Product & Company Identification

**Product Name:** DEKA Battery Cleaner (aerosol)

**Product Number(s):** East Penn Product ID: 00321

**Product Use:** Battery Cleaner

**Supplied By:**
East Penn Manufacturing Co. Inc.
102 Deka Road
Lyon Station, PA 19536

Customer Service (610) 682-6361
24-Hr Emergency – CHEMTREC: (800) 424-9300

Section 2: Hazards Identification

**Emergency Overview**
CAUTION: Contents Under Pressure. Vapor harmful.
As defined by OSHA’s Hazard Communication Standard, this product is hazardous.
Appearance & Odor: Clear liquid, no odor
Do not use or store near heat, sparks, open flame or any other source of ignition.

**Potential Health Effects:**

- **EYE:** May cause mild irritation including redness and burning.
- **SKIN:** Prolonged or repeated contact can cause irritation and defatting of the skin.
- **INHALATION:** Inhalation of a small amount is not expected to cause health effects. Prolonged exposure may cause dizziness or throat irritation.
- **INGESTION:** Ingestion of a small amount is not expected to cause health effects. Ingestion of a larger amount may cause irritation to gastrointestinal tract.

**CHRONIC EFFECTS:** None known

**TARGET ORGANS:** None known

Medical Conditions Aggravated by Exposure: pre-existing skin or eye disorders
See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>80 - 90</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>2.9</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>144-55-8</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Detergent</td>
<td>various</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>68476-86-9</td>
<td>3 - 8</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

**Eye Contact:** Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

**Inhalation:** Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

**Ingestion:** Do not induce vomiting. Call a physician.
Section 5: Fire-Fighting Measures

Flammable Properties: This product is non-flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6)).

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>None</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>None</td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>ND</td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>ND</td>
</tr>
</tbody>
</table>

Fire and Explosion Data:

Suitable Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Use with adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. Do not expose aerosol containers to heat or flame. Do not incinerate container. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: I

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Water</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>50</td>
<td>NE</td>
<td>20</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Detergent</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>1000</td>
<td>NE</td>
<td>1000</td>
</tr>
</tbody>
</table>

N.E. – Not Established   (c) – ceiling   (s) – skin   (v) – vacated

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.
Respiratory Protection: None required for normal work where adequate ventilation is provided. Air monitoring is needed to determine actual employee exposure levels. Use a NIOSH-approved self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

**Section 9: Physical and Chemical Properties**

- **Physical State:** liquid
- **Color:** clear
- **Odor:** no odor
- **Odor Threshold:** ND
- **Specific Gravity:** 1.04
- **Initial Boiling Point:** ~ 212°F
- **Freezing Point:** ~ 32°F
- **Vapor Pressure:** ND
- **Vapor Density:** > 1 (air = 1)
- **Evaporation Rate:** slow
- **Solubility:** soluble in water
- **Coefficient of water/oil distribution:** ND
- **pH:** 8.5
- **Volatile Organic Compounds:** wt %: 7.9 g/L: 82.16 lbs/gal: 0.68

**Section 10: Stability and Reactivity**

- **Stability:** Stable
- **Conditions to Avoid:** Keep away from heat, direct sunlight, open flames or sparks. Dropping of containers may cause bursting.
- **Incompatible Materials:** Strong oxidizers
- **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide
- **Possibility of Hazardous Reactions:** No

**Section 11: Toxicological Information**

- Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

**Acute Toxicity:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mL/kg</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>470 mg/kg</td>
<td>220 mg/kg</td>
<td>450 ppm/4H</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>4220 mg/kg</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Detergent</td>
<td>3000 mg/kg</td>
<td>4400 mg/kg</td>
<td>No data</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>

**Chronic Toxicity:**

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant</th>
<th>Sensitizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (severe) / S (mild) / R (mild)</td>
<td>No</td>
</tr>
<tr>
<td>Sodium bicarbonate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Detergent</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (severe) / Se (mild)</td>
<td>No</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Reproductive Toxicity:** No information available

**Teratogenicity:** No information available

**Mutagenicity:** No information available

**Synergistic Effects:** No information available
Section 12: Ecological Information
Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: 2-Butoxyethanol
- 96 Hr LC50, Bluegill sunfish: 1490 mg/L
- 24 Hr LC50, daphnia: 1720 mg/L

Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations
Waste Classification: The dispensed liquid product is not a RCRA hazardous waste. Pressurized containers are a D003 reactive waste. (See 40 CFR Part 261.20 – 261.33)
Empty aerosol containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information
US DOT (ground): Consumer Commodity, ORM-D
ICAO/IATA (air): Consumer Commodity, ID8000, 9
IMO/IMDG (water): Aerosols, UN1950, 2.2, Limited Quantity
Special Provisions: None

Section 15: Regulatory Information
U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):
All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):
Reportable Quantities (RQ’s) exist for the following ingredients: None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:
Section 302 Extremely Hazardous Substances (EHS): None
Section 311/312 Hazard Categories:
- Fire Hazard: No
- Reactive Hazard: No
- Release of Pressure: Yes
- Acute Health Hazard: Yes
- Chronic Health Hazard: No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- 2-Butoxyethanol (glycol ethers): 2.9%

Clean Air Act:
Section 112 Hazardous Air Pollutants (HAPs): None

U.S. State Regulations:
California Safe Drinking Water and Toxic Enforcement Act (Prop 65):
This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None

Consumer Products VOC Regulations: This product is not regulated

State Right to Know:
New Jersey: 111-76-2, 68476-86-8
Pennsylvania: 111-76-2, 68476-86-8
Massachusetts: 111-76-2, 68476-86-8
Rhode Island: 111-76-2, 68476-86-8

Canadian Regulations:
Controlled Products Regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
Product Name: DEKA Battery Cleaner (aerosol)
East Penn Product ID (s): 00321

WHMIS Hazard Class: A, D1A, D1B, D2B
Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:

Additional Regulatory Information: None

Section 16: Other Information

<table>
<thead>
<tr>
<th>HMIS® (II)</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1</td>
<td>0</td>
</tr>
<tr>
<td>Flammability: 0</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td></td>
</tr>
<tr>
<td>PPE: B</td>
<td></td>
</tr>
</tbody>
</table>

Ratings range from 0 (no hazard) to 4 (severe hazard)

Revision Date: 11/30/2012

Changes since last revision: MSDS reformatted to meet the requirements of the Canadian Controlled Products Regulations.

Disclaimer
This Material Safety Data Sheet is based upon information and sources available at the time of preparation or revision date. The information in the MSDS was obtained from sources, which we believe are reliable, but are beyond our direct supervision or control. We make no Warranty of Merchantability, Fitness for any particular purpose, or any other Warranty, Expressed or Implied, with respect to such information, and we assume no liability resulting from its use. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use of, or disposal of the product. It is the obligation of each user of the product to determine the suitability of this product and comply with the requirements of all applicable laws regarding use and disposal of this product. For additional information concerning East Penn Manufacturing Co., Inc. products or questions concerning the content of this MSDS please contact your East Penn representative.

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List
g/L: grams per Liter
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
l/l: pounds per gallon
LC: Lethal Concentration
LD: Lethal Dose
NA: Not Applicable
ND: Not Determined
NIOSH: National Institute of Occupational Safety & Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PMCC: Pensky-Martens Closed Cup
PPE: Personal Protection Equipment
ppm: Parts per Million
RoHS: Restriction of Hazardous Substances
STEL: Short Term Exposure Limit
TCC: Tag Closed Cup
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System