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Version 1.01

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** 80-473 BATTERY CLEANER WITH ACID DETECTOR**Recommended use of the chemical  
and restrictions on use****Product code** F00524**Product Type** Non-flammable aerosol  
**Synonyms** None**Supplier's details****Recommended Use** Battery Cleaner.  
**Uses advised against** No information available**Manufactured For:**  
Kimball Midwest  
4800 Roberts Rd.  
Columbus, OH 43228**Emergency telephone number**  
**Chemical Emergency Phone** Chemtrec 1-800-424-9300  
**Number**  
**Company Emergency Phone** 800-233-1294  
**Number**

**2. HAZARDS IDENTIFICATION**

**Classification**

Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Gases under pressure	Compressed Gas

**GHS Label elements, including  
precautionary statements**

**Emergency Overview**

**WARNING**

**Hazard Statements**

Harmful if swallowed  
Harmful in contact with skin  
Harmful if inhaled  
Causes skin irritation  
Causes serious eye irritation  
Contains gas under pressure; may explode if heated



**Appearance** Clear

**Physical state** Aerosol

**Odor** Mild

**Precautionary Statements - Prevention**

Wash hands thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not eat, drink or smoke when using this product  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water.  
Call a POISON CENTER or doctor/physician if you feel unwell  
Wash contaminated clothing before reuse  
If skin irritation occurs: Get medical advice/attention  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

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

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None

**Other information**

• Very toxic to aquatic life with long lasting effects

0.02099322% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %*
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	16.1209
TRIETHANOLAMINE	102-71-6	1.67674

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

**4. FIRST AID MEASURES**

**First aid measures for different exposure routes**

<b>General advice</b>	Avoid contact with skin, eyes, and clothing. Avoid breathing, vapors, mist, or gas.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

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

**Main Symptoms** May cause skin irritation. Causes eye irritation. Ingestion causing lung damage. Inhalation causing Central Nervous System effects.

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

**Notes to physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

water fog. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Cool containers / tanks with water spray.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Propellant is flammable. Container may burst in fire.

**Explosion Data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

**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. Use shielding to protect fire-fighters from bursting containers.

**6. ACCIDENTAL RELEASE MEASURES**

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

**Personal precautions** Use with adequate ventilation to keep the exposure levels below the OELS.

**Environmental precautions**

**Environmental precautions** Report spills as required by local and federal regulations.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Contain liquid and collect with an inter,non-combustible material.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid skin contact. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

**Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible products** Store away from strong oxidizers and acids.

**Aerosol Level** 1

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6:TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> 106-97-8:TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup> 75-28-5:TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>
TRIETHANOLAMINE 102-71-6	TWA: 5 mg/m <sup>3</sup>	-	-

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** Ventilation systems. Use adequate ventilation to keep the exposure levels below the OELs.

**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.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical and chemical properties**

<b>Physical state</b>	Aerosol	<b>Odor</b>	Mild
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	No information available
<b>Color</b>	amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	9	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	-91 °C / -132 °F	Based on propellant
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	0.972	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	

**Other information**

**VOC Content(%)** 16.96

**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**

Store away from strong oxidizers and acids.

**Hazardous Decomposition Products**

Carbon oxides. Fumes. Hydrocarbons.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known information
<b>Inhalation</b>	Inhalation of vapors in high concentration may cause irritation of respiratory system.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.
<b>Ingestion</b>	Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
TRIETHANOLAMINE 102-71-6	= 4190 mg/kg ( Rat )	> 20 mL/kg ( Rabbit )	-

**Information on toxicological effects**

**Symptoms** Irritating to skin. Prolonged or repeated exposure may cause dermatitis. Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal. Contact with eyes may cause irritation.

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

**Skin corrosion/irritation** Irritating to skin.  
**Eye damage/irritation** Irritating to eyes.  
**Sensitization** No information available.  
**Germ Cell Mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
TRIETHANOLAMINE 102-71-6	-	Group 3	-	-

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** The ingredients are not reproductive hazards.  
**Specific target organ systemic toxicity (single exposure)** No information available.  
**Specific target organ systemic toxicity (repeated exposure)** No information available.

**Chronic toxicity** Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact may defat the skin and produce dermatitis.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0.02099322% of the mixture consists of ingredient(s) of unknown toxicity  
**The following values are calculated based on chapter 3.1 of the GHS document .**  
**ATEmix (oral)** 55818 mg/kg  
**ATEmix (dermal)** 1342038 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

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

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	<=2.8
TRIETHANOLAMINE 102-71-6	-2.53

**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). Dispose of in accordance with federal, state, and local regulations.

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

**14. TRANSPORT INFORMATION**

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

**IATA** UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, LTD. QTY

**IMDG** UN1950, AEROSOLS, 2.2,LTD. QTY.

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL/NDL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
TRIETHANOLAMINE	X	X	X	X	X	X	X	X

**Legend:**

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - 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**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	Yes
<b>Reactive Hazard</b>	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**

No warning required.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
TRIETHANOLAMINE 102-71-6	X	X	X

**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**

<u>NFPA</u>	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 2	Physical Hazard 1	Personal protection B

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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**