



Chemical Name: Battery Cleaner and Acid Detector

Manufacturer: Lawson

Container size: 15oz.

Location: VLA

Disposal: Place empty container in trash. Give partial or full container to safety officer.



Material Safety Data Sheet

Revision Date 08-Feb-2011

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code 89153
Product name Battery Cleaner & Acid Leak Detector
Recommended Use Solvent
Supplier Lawson Products, Inc.
1666 East Touhy Avenue
Des Plaines, IL 60018
(847)-827-9666
Emergency telephone number (888) 426-4851

2. HAZARDS IDENTIFICATION

Emergency Overview
Contents under pressure. Irritant.

Aggravated Medical Conditions
None Known

Principal Routes of Exposure
Skin contact. Inhalation. Eyes.

Potential health effects

Eyes Exposure to vapors may cause the following effects: Irritation. Reddening. Burning sensation.

Skin Repeated or prolonged exposure may cause: Skin Irritation. Redness. Itching. Burning sensation.

Inhalation Exposure to vapors may cause the following effects. Irritating to respiratory system. Headaches. Dizziness. Nausea. Loss of coordination. Extreme overexposure may cause. Central nervous system depression. Possible unconsciousness. Death. Misuse by deliberately concentrating vapors and inhaling contents can be harmful or fatal.

Ingestion May be harmful if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Propane	74-98-6	1-5
Butane	106-97-8	5-10
Isopropyl alcohol	67-63-0	5-10

Ethylene oxide	75-21-8	<0.0001
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4. FIRST AID MEASURES

Eye contact Flush with plenty of water for at least 15 minutes. Seek medical attention.

Skin contact Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Seek medical attention if irritation persists.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Inhalation Remove to fresh air. Restore breathing. Keep warm and quiet.

5. FIRE FIGHTING MEASURES

Flash point °C < -17.78
Flash point °F < 0
Method No information available

Autoignition temperature °C No data available
Autoignition temperature °F No data available

Flammability Limits (% in Air)
Upper 12.7
Lower 1.9

Specific Information for Aerosol Products

Flame extension None
Flashback None

Suitable extinguishing media
Carbon dioxide (CO₂). Dry chemical. Alcohol foam.

Special protective equipment for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Fire and Explosion Hazards
Containers may vent or burst under extreme or prolonged fire conditions. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Sensitivity to shock

No information available.

Sensitivity to static discharge

No information available.

6. ACCIDENTAL RELEASE MEASURES**Methods for cleaning up**

Eliminate all sources of ignition. Ventilate area to maintain exposure below permissible exposure limits. Soak up with inert absorbent material. Dispose of absorbent in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE**Handling**

Keep away from open flames, hot surfaces and sources of ignition. Vapors may accumulate readily and may ignite explosively. Ensure adequate ventilation. Do not smoke. Turn off other sources of ignition prior to use and until all vapors have dissipated. Do not puncture or incinerate. Do not take internally. Keep out of reach of children. Check to make sure that all equipment is properly grounded and installed to satisfy electrical classification requirements. Standard safety precautions should be observed when handling this material.

Storage

Containers exposed to extreme heat may burst. Keep away from heat and sources of ignition. Store in temperatures below 120 degrees F. Keep away from direct sunlight. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Butane	800 ppm	-	1000 ppm	-
Isopropyl alcohol	400 ppm 980 mg/m ³	-	200 ppm	400 ppm
Propane	1000 ppm 1800 mg/m ³	-	1000 ppm	-
Ethylene oxide	1 ppm	-	1 ppm	-

Ventilation and Environmental Controls

Use enough ventilation, local exhaust at the work area, general, or both, to keep below the TLV's in the worker's breathing zone and the general area. Use in a well ventilated area.

Hygiene measures

Wash hands before eating or using the washroom. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing.

Respiratory protection

If the exposure limits are exceeded, a NIOSH/MSHA approved respirator is recommended. Wear a NIOSH approved organic vapor/particulate respirator.

Hand Protection

Gloves are not required in normal use. The following gloves are recommended for prolonged or repeated contact: . Chemical resistant gloves.

Eye protection

Wear safety glasses with side shields.

Skin and body protection

None necessary under normal conditions

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Aerosol
Color	Colorless
Odor	No information available
Odor Threshold	No information available
pH	7.0
Specific Gravity	0.93
Vapor pressure	No data available
Density	7.71 lb/gal; 923 g/l
Vapor density	>Air
Evaporation Rate	>1 (Ether =1)
Water solubility	No data available
VOC Content	15.90%
Partition Coefficient (n-octanol/water)	No data available
Boiling point/range °C	< -18 - 100
Boiling point/range °F	< 0 - 213
Melting point/range °C	No data available
Melting point/range °F	No data available
Flash point °C	< -17.78
Flash point °F	< 0

10. STABILITY AND REACTIVITY**Stability**

Stable.

Conditions to avoid

None known.

Incompatibility

None known.

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Cleaner & Acid Leak
Detector**

Hazardous Decomposition Products

Carbon dioxide. Carbon monoxide.

Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Component Information

Chemical Name	LD50 (oral,rat)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat)
Butane 106-97-8	-	-	658 mg/L
Isopropyl alcohol 67-63-0	4396 mg/kg	12800 mg/kg 12870 mg/kg	72.6 mg/L
Propane 74-98-6	-	-	658 mg/L
Ethylene oxide 75-21-8	72 mg/kg	-	-

Synergistic Products None known

Potential health effects

Sensitization None known

Chronic toxicity See Section 2 .

Mutagenic effects None known

Teratogenic effects None known

Reproductive toxicity None known

Target Organ Effects See Section 2. Reports have associated prolonged overexposure to solvents with permanent brain and nervous system damage.

Carcinogenic effects See table below

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
Butane	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Isopropyl alcohol	Listed	Not Listed	Not Listed	Not Listed	Not Listed
Propane	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Ethylene oxide	Listed	Group 1	Listed	Not Listed	Listed

12. ECOLOGICAL INFORMATION

Isopropyl alcohol

Microtox Data

Photobacterium phosphoreum EC50=35390 mg/L (5 min)

Water Flea Data

Daphnia magna hEC50 48 (13299 mg/L)

Ethylene oxide

Water Flea Data

Daphnia magna hEC50 48 (137 mg/L)

13. DISPOSAL CONSIDERATIONS

Disposal Information

As supplied, this product is a RCRA Hazardous Waste . Waste must be tested for ignitability to determine EPA hazardous waste numbers. Do not puncture or incinerate. Depressurize before disposal. Dispose in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

DOT

Consumer commodity, ORM-D

TDG

Consumer commodity, ORM-D

15. REGULATORY INFORMATION

US EPA SARA 313

Chemical Name	US EPA SARA 313 Emission Reporting
Isopropyl alcohol	Listed
Ethylene oxide	Listed

Chemical Name	CERCLA/SARA 302 TPQ
Ethylene oxide	\$1000 lb, TPQ

State Regulations

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
Butane	Listed	Listed	Not Listed
Isopropyl alcohol	Listed	Listed	Not Listed
Propane	Listed	Listed	Not Listed
Ethylene oxide	Listed	Listed	Carcinogen Female Reproductive

Chemical Name	Type
Ethylene oxide - 75-21-8	Female Reproductive

WARNING: This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm

Product code **89153**

Product name **Battery
Cleaner & Acid Leak
Detector**

International Inventories

Chemical Name	EINECS	DSL	NDSL	TSCA
Butane	X	X	-	X
Isopropyl alcohol	X	X	-	X
Propane	X	X	-	X
Ethylene oxide	X	X	-	X

CPR

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATION

HMIS

Health - 2
Flammability - 2
Physical Hazard - 0

Prepared By

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The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.