Safety Data Sheet

Issue date 18-May-2018 **Revision date** 12-Mar-2019 **Revision Number** 2

1. IDENTIFICATION

Product identification

Product identifier	Lawson Battery Cleaner and Acid Detector
Other means of identification	89153
Recommended use	Solvent, Cleaner
Restrictions on use	For industrial use only

Supplier

Corporate Headquarters:
Lawson Products, Inc.
8770 W. Bryn Mawr Ave., Suite 900
Chicago, IL 60631
(866) 837-9908

Canadian Distribution Center:
Lawson Canada
7315 Rapistan Court
Mississauga, ON L5N 5Z4
(800) 323-5922

24 Hour Emergency Phone Number (888) 426-4851 (Prosar)

2. HAZARD(S) IDENTIFICATION

Hazard Classification This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable aerosols	Category 1
Gases under pressure	Compressed gas

Symbol

Signal word DANGER

Hazard statements

H222 - Extremely flammable aerosol
H280 - Contains gas under pressure; may explode if heated
H304 - May be fatal if swallowed and enters airways
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements

General

P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P103 - Read label before use.

Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 - Pressurized container: Do not pierce or burn, even after use
P211 - Do not spray on an open flame or other ignition source
P260 - Do not breathe dusts or mists

Response

General

P314 - Get medical advice/attention if you feel unwell.

Ingestion

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting

Storage

P405 - Store locked up
P410 - Protect from sunlight
P412 - Do not expose to temperatures exceeding 50 °C/122 °F
P403 - Store in a well-ventilated place

Disposal

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Hazard(s) Not Otherwise Classified (HNOC)

None known.

Physical Hazards Not Otherwise Classified (PHNOC)

None known.

Unknown acute toxicity

unknown toxicity: 9% inhalation, 10%dermal, 10% oral

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition

Mixture.

Chemical name	CAS-No	Weight %
Butane	106-97-8	6.8
Isopropyl alcohol	67-63-0	5.9
Propane	74-98-6	3.1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or environment and hence require reporting in this section

4. FIRST-AID MEASURES

Necessary first-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion	Get medical attention immediately. Call a POISON CENTER or doctor. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and footwear. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
Most important symptoms (acute)	May be fatal if swallowed and enters airways.
Most important symptoms (over-exposure)	Adverse symptoms may include the following:. eye pain, redness, and watering. Respiratory tract irritation. Coughing. Ingestion may cause nausea or vomiting.
Indication of any immediate medical attention and special treatment needed	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. See section 11 for toxicological information.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards	Extremely Flammable Aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may cause fire or explosion hazard. Hazardous Thermal Decomposition Products:. Carbon dioxide. Carbon monoxide. metal oxide/oxides.
Special protective equipment for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if you can do it without risk. Use water spray to keep fire-exposed containers cool. Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in the hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear

appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information for 'non-emergency personnel'. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small Spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry in sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Use spark-proof tools and explosion proof equipment. See section 1 for emergency contact information and section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for safe handling

Put on appropriate personal protective equipment (see section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not breathe vapors or spray mist. Do not take internally. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store away from direct sunlight in dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all sources of ignition. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Butane	-	1000 ppm STEL	800 ppm TWA 1900 mg/m³ TWA
Isopropyl alcohol	400 ppm TWA 980 mg/m³ TWA	400 ppm STEL 200 ppm TWA	500 ppm STEL 1225 mg/m³ STEL 400 ppm TWA 980 mg/m³ TWA
Propane	1000 ppm TWA 1800 mg/m³ TWA	-	1000 ppm TWA 1800 mg/m³ TWA

Appropriate engineering controls

Ensure adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering

modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures, such as personal protective equipment

Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection:. Safety glasses with side-shields.

Skin and body protection

Chemical-resistant, impervious gloves (Nitrile or Viton) complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use the the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying (Organic vapor) or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Canadian Province Occupational Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
Butane	1000 ppm TWA	750 ppm STEL	1000 ppm STEL	800 ppm TWA 1900 mg/m³ TWA	1000 ppm STEL	1000 ppm STEL	1000 ppm STEL	1000 ppm STEL	800 ppm TWAEV 1900 mg/m³ TWAEV	1250 ppm STEL 1000 ppm TWA 1000 ppm TWA 1000 ppm TWA
Isopropyl alcohol	400 ppm STEL 984 mg/m³ STEL 200 ppm TWA 492 mg/m³ TWA	400 ppm STEL 200 ppm TWA	200 ppm TWA 400 ppm STEL	500 ppm STEL 1230 mg/m³ STEL 400 ppm TWA 983 mg/m³ TWA	400 ppm STEL 200 ppm TWA	400 ppm STEL 200 ppm TWA	400 ppm STEL 200 ppm TWA	400 ppm STEL 200 ppm TWA	500 ppm STEV 1230 mg/m³ STEV 400 ppm TWAEV 985 mg/m³ TWAEV	400 ppm STEL 200 ppm TWA
Propane	1000 ppm TWA	-	-	-	-	-	-	-	1000 ppm TWAEV 1800 mg/m³ TWAEV	1250 ppm STEL 1000 ppm TWA 1000

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
										ppm TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Odor	Not available
Odor threshold	Not available
pH	7
Melting point/range °C	Not available
Melting point/range °F	Not available
Boiling point/range °C	Not available
Boiling point/range °F	Not available
Flash point °C	-29
Flash point °F	-20.2
Flash point method used	Pensky-Martens C.C.
Evaporation rate	Not available
Flammability (Solid, Gas)	Not available
Lower explosion limit	1.9 %
Upper explosion limit	12.7 %
Vapor pressure	13.5 kPa (101.325mm Hg) [at 20°C]
Vapor density	1(Air=1)
Relative density	0.92
Solubility	Not available
Partition coefficient (n-octanol/water)	Not available
Autoignition temperature °C	Not available
Autoignition temperature °F	Not available
Decomposition temperature °C	Not available
Decomposition temperature °F	Not available
Viscosity	Kinematic (40°C (104°F)): <0.07cm²/s (<7 cSt) Kinematic (room temperature): <0.07 cm²/s (<7 cSt)

10. STABILITY AND REACTIVITY

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability Stable.

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid Avoid heat, sparks, and other sources of ignition.

Incompatible materials No specific data.

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Ingestion.

Symptoms May be fatal if swallowed and enters airways. Adverse symptoms may include the following:. eye pain, redness, and watering. Respiratory tract irritation. Coughing. Ingestion may cause nausea or vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure May cause damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Butane	= 658 g/m³ (Rat) 4 h	-	-
Isopropyl alcohol	= 72600 mg/m³ (Rat) 4 h	= 4059 mg/kg (Rabbit)	= 1870 mg/kg (Rat)
Propane	> 800000 ppm (Rat) 15 min	-	-

ATEmix (dermal) Not available

ATEmix (oral) 52884.9 mg/kg

ATEmix (inhalation-gas) Not available

ATEmix (inhalation-vapor) Not available

ATEmix (inhalation-dust/mist) Not available

Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Butane	-	-	-	-
Isopropyl alcohol	A4	Group 1 Group 3	Listed	-
Propane	-	-	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Butane	-	-	-	-	-	-
Isopropyl alcohol	-	-	ACGIH A4	-	ACGIH A4	-
Propane	-	-	-	-	-	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish
Butane	-	-
Isopropyl alcohol	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50 11130: 96 h Pimephales promelas mg/L LC50 static
Propane	-	-

Persistence and degradability Not available.

Bioaccumulation

Chemical name	CAS-No	Partition coefficient (log Kow)
Butane 106-97-8	106-97-8	2.89 <=2.8
Isopropyl alcohol 67-63-0	67-63-0	0.05 25 °C
Propane 74-98-6	74-98-6	2.3 <=2.8

Mobility in soil Not available.

Other adverse effects No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Disposal information The generation of waste should be avoided or minimized whenever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Contaminated packaging Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its containers must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT

ID-No	UN1950
Proper shipping name	Aerosols
Hazard Class(es)	2.1
Packing group	
Special Provisions	LTD QTY

TDG

ID-No	UN1950
Proper shipping name	Aerosols
Hazard Class(es)	2.1
Packing group	
Special Provisions	LTD QTY

IATA

ID-No	UN1950
Proper shipping name	Aerosols, flammable
Hazard Class(es)	2.1
Subsidiary Risk	
Packing group	
Special Provisions	LTD QTY

IMDG/IMO

ID-No	UN1950
Proper shipping name	Aerosols
Hazard Class(es)	2.1
Packing group	
EmS No	F-D, S-U
Special Provisions	LTD QTY

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Butane	106-97-8	-	-	-
Isopropyl alcohol	67-63-0	-	-	-
Propane	74-98-6	-	-	-

Special Precautions

Multi-modal shipping descriptions are provided for informational purposes and do not consider container size. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

15. REGULATORY INFORMATION

State regulations

U.S. state Right-to-Know regulations

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Butane	106-97-8	X	X	X
Isopropyl alcohol	67-63-0	X	X	X
Propane	74-98-6	X	X	X

California Prop. 65

Chemical name	CAS-No	California Prop. 65
Butane	106-97-8	-
Isopropyl alcohol	67-63-0	-
Propane	74-98-6	-

California Proposition 65 WARNING: This product contains a chemical(s) known to the state of California to cause cancer, birth defects or other reproductive harm

U.S. Federal Regulations

US EPA SARA 313

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Butane	106-97-8	-	-
Isopropyl alcohol	67-63-0	-	1.0 %
Propane	74-98-6	-	-

US EPA SARA 311/312 hazardous categorization Not available

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
Butane	X	X	-
Isopropyl alcohol	X	X	-
Propane	X	X	-

Legend X - Listed

16. OTHER INFORMATION

NFPA

Health Not available
Flammability Not available
Instability Not available

HMIS

Health 2
Flammability 2
Physical hazards 0
Personal protection To be determined by customer.

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by Regulatory Affairs

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Revision note

Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists)
ATE (Average Toxicity Estimate)
DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
HMIS (Hazardous Materials Identification System)
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG/IMO (International Maritime Dangerous Goods/International Maritime Orgnaization)
NFPA (National Fire Protection Association)
NTP (National Toxicology Program)
OEL (Occupational Exposure Level)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
TSCA (Toxic Substance Control Act)
USEPA (United States Environmental Protection Agency)

Disclaimer

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.

End of Safety Data Sheet