

Issue date 18-May-2018

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Revision Number 1

1. IDENTIFICATION**Product identification**

Product identifier	Drummond™ Ogle Glass and Hard Surface Cleaner
Other means of identification	DA6851
Recommended use	Cleaner
Restrictions on use	For industrial use only

Supplier

Corporate Headquarters:
Drummond™, A Lawson Brand
Lawson Products, Inc.
8870 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).

Gases under pressure

Liquefied Gas

Symbol

Signal word WARNING

Hazard statements H280 - Contains gas under pressure; may explode if heated

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	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood
Response	
Skin	P264 - Wash skin thoroughly after handling
Storage	P403 - Store in a well-ventilated place P410 - Protect from sunlight
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	None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Mixture.

Chemical name	CAS-No	Weight %
Ethyl Alcohol	64-17-5	2.5-10
2-Butoxyethanol	111-76-2	2.5-10
Propane	74-98-6	1-2.5
N-Butane	106-97-8	1-2.5

Other components below reportable levels.

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Necessary first-aid measures

Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Rinse mouth.
Skin contact	Seek medical attention if irritation persists.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek medical attention if irritation persists.
Most important symptoms (acute)	Direct contact with the eyes may cause temporary irritation.
Most important symptoms (over-exposure)	Not available.
Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Water fog. Foam. Dry chemical. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards	Contents under pressure. During fire, gases hazardous to health may be formed.
Special protective equipment for fire-fighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Stop leak if you can without risk. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do it without risk. Cool containers exposure to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn out. Use standard firefighting procedures and consider the hazards of other involved materials.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary and unprotected personnel from entering the area. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Wear personal protective clothing and equipment, see section 8.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc) away from spilled material. Stop leak if you can without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewers, basements, and confined areas. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. See section 1 for emergency contact information and section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for safe handling	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, drill, grind, or weld near containers. Keep away from open flames, hot surfaces and sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in a well ventilated area. Wear appropriate personal protective equipment. Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage, including any incompatibilities	Beware: Aerosol is pressurized. Protect from sunlight. Do not expose to temperatures exceeding 122 °F (50 °C). Do not puncture, incinerate, or crush. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep containers tightly closed in a dry, cool and well-ventilated place. Refrigeration recommended. Do not store or use near incompatible materials. See section 10 for incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
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Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Ethyl Alcohol	1000 ppm TWA 1900 mg/m ³ TWA	1000 ppm STEL	1000 ppm TWA 1900 mg/m ³ TWA
2-Butoxyethanol	Skin 50 ppm TWA 240 mg/m ³ TWA	20 ppm TWA	5 ppm TWA 24 mg/m ³ TWA
Propane	1000 ppm TWA 1800 mg/m ³ TWA	-	1000 ppm TWA 1800 mg/m ³ TWA
N-Butane	-	1000 ppm STEL	800 ppm TWA 1900 mg/m ³ TWA

Appropriate engineering controls

Ensure adequate ventilation. As a rule, at least 10 air changes per hour are recommended at the workplace. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye protection

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

Suitable protective clothing. Wear appropriate thermal protective clothing when necessary.

Respiratory protection

If permissible levels are exceeded use NIOSH mechanical filter/organic vapor cartridge or an air-supplied respirator. If engineering controls do not maintain airborne concentrations below recommended exposure limits, where applicable, or to an acceptable level, in countries where exposure limits have not been established, an approved respirator must be worn.

Hygiene measures

When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice. Washing hands, face, neck and arms thoroughly before eating or smoking is recommended. Routinely wash work clothing and protective equipment to remove contaminants.

Canadian Province Occupational Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland and Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
Ethyl Alcohol	1000 ppm TWA 1880 mg/m ³ TWA	1000 ppm STEL	1000 ppm STEL	1000 ppm TWA 1880 mg/m ³ TWA	1000 ppm STEL	1000 ppm STEL	1000 ppm STEL	1000 ppm STEL	1000 ppm TWA 1880 mg/m ³ TWA	1250 ppm STEL 1000 ppm TWA
2-Butoxyethanol	20 ppm TWA 97 mg/m ³ TWA	20 ppm TWA	20 ppm TWA	25 ppm TWA 121 mg/m ³ TWA	20 ppm TWA	20 ppm TWA	20 ppm TWA	20 ppm TWA	20 ppm TWA 97 mg/m ³ TWA	30 ppm STEL 20 ppm TWA
Propane	1000 ppm TWA	1000 ppm TWA 1000 ppm TWA	-	-	-	-	-	-	1000 ppm TWA 1800 mg/m ³ TWA	1250 ppm STEL 1000 ppm TWA 1000 ppm TWA
N-Butane	1000 ppm TWA	750 ppm STEL 600 ppm TWA 1000 ppm TWA	1000 ppm STEL	800 ppm TWA 1900 mg/m ³ TWA	1000 ppm STEL	1000 ppm STEL	1000 ppm STEL	1000 ppm STEL	800 ppm TWA 1900 mg/m ³ TWA	1250 ppm STEL 1000 ppm TWA 1000 ppm TWA

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundl and & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatche wan - OEL
										1000 ppm TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Aerosol
Color	Light yellow
Odor	Characteristic
Odor threshold	Not available
pH	9.1 - 10.1
Melting point/range °C	Not available
Melting point/range °F	Not available
Boiling point/range °C	100 °C
Boiling point/range °F	212 °F
Flash point °C	-104.4
Flash point °F	-156.0
Flash point method used	based on propellant
Evaporation rate	Not available
Flammability (Solid, Gas)	Not available
Lower explosion limit	Not available
Upper explosion limit	Not available
Vapor pressure	80-100 PSI @ 70 F
Vapor density	Not available
Relative density	0.977 - 0.997
Solubility	Not available
Partition coefficient (n-octanol/water)	Not applicable
Autoignition temperature °C	Not applicable
Autoignition temperature °F	Not applicable
Decomposition temperature °C	Not available

Decomposition temperature °F Not available

Viscosity Not available

10. STABILITY AND REACTIVITY

Reactivity The product is stable and not reactive under normal conditions of use, storage and transport.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions No dangerous reactions under normal conditions of use. Hazardous polymerization does not occur.

Conditions to avoid Avoid heat, sparks, and other sources of ignition. Avoid temperatures exceeding the flash point. Avoid contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Dermal. Inhalation. Ingestion. Eyes.

Symptoms Prolonged inhalation may be harmful. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been seen in humans. Direct contact with the eyes may cause temporary irritation. May be harmful if inhaled. May be harmful if swallowed or in contact with skin. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Delayed and immediate effects as well as chronic effects from short and long-term exposure May be irritating to the skin. Prolonged skin contact may cause skin irritation. Direct contact with eyes may cause temporary irritation. May be irritating to the eyes. Prolonged inhalation may be harmful. May be harmful if absorbed through the skin. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been seen in humans.

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Ethyl Alcohol	= 124.7 mg/L (Rat) 4 h	-	= 7060 mg/kg (Rat)
2-Butoxyethanol	= 450 ppm (Rat) 4 h = 486 ppm (Rat) 4 h	= 99 mg/kg (Rabbit)	= 470 mg/kg (Rat)
Propane	> 800000 ppm (Rat) 15 min	-	-
N-Butane	= 658 g/m ³ (Rat) 4 h	-	-

ATEmix (dermal) Not available

ATEmix (oral) Not available

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
Ethyl Alcohol	A3	Group 1	Listed	Known
2-Butoxyethanol	A3	Group 3	-	-
Propane	-	-	-	-
N-Butane	-	-	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Ethyl Alcohol	-	-	ACGIH A3	ACGIH A4	ACGIH A3	-
2-Butoxyethanol	-	-	ACGIH A3	-	ACGIH A3	-
Propane	-	-	-	-	-	-
N-Butane	-	-	-	-	-	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish
Ethyl Alcohol	-	13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static
2-Butoxyethanol	-	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50
Propane	-	-
N-Butane	-	-

Persistence and degradability Not available.

Bioaccumulation

Chemical name	CAS-No	Partition coefficient (log Kow)
Ethyl Alcohol 64-17-5	64-17-5	-0.32
2-Butoxyethanol 111-76-2	111-76-2	0.81 25 °C
Propane 74-98-6	74-98-6	2.3 <=2.8
N-Butane 106-97-8	106-97-8	2.89 <=2.8

Mobility in soil Not available.

Other adverse effects No adverse affects expected The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. DISPOSAL CONSIDERATIONS

Disposal information Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate, or crush. Discard container or liner in accordance with federal, state, and local regulations.

Contaminated packaging Dispose in accordance with local, state and federal regulations. Empty containers or liners may retain some product residues. This material and its containers must be disposed of in a safe way. Empty containers should be taken for local recycling, recovery or waste disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT

ID-No UN1950
Proper shipping name Aerosols
Hazard Class(es) 2.2
Subsidiary Risk
Packing group
Special Provisions LTD QTY

TDG

ID-No UN1950
Proper shipping name Aerosols
Hazard Class(es) 2.2
Packing group
Special Provisions LTD QTY

IATA

ID-No UN1950
Proper shipping name Aerosols, non-flammable
Hazard Class(es) 2.2
Subsidiary Risk
Packing group
Special Provisions LTD QTY

IMDG/IMO

ID-No UN1950
Proper shipping name Aerosols
Hazard Class(es) 2.2
Packing group
Special Provisions LTD QTY

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Ethyl Alcohol	64-17-5	-	-	-
2-Butoxyethanol	111-76-2	-	-	-
Propane	74-98-6	-	-	-
N-Butane	106-97-8	-	-	-

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
Ethyl Alcohol	64-17-5	X	X	X
2-Butoxyethanol	111-76-2	X	X	X
Propane	74-98-6	X	X	X
N-Butane	106-97-8	X	X	X

California Prop. 65

Chemical name	CAS-No	California Prop. 65
Ethyl Alcohol	64-17-5	Carcinogen Developmental
2-Butoxyethanol	111-76-2	-
Propane	74-98-6	-
N-Butane	106-97-8	-

U.S. Federal Regulations**US EPA SARA 313**

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Ethyl Alcohol	64-17-5	-	-
2-Butoxyethanol	111-76-2	-	1.0 %
Propane	74-98-6	-	-
N-Butane	106-97-8	-	-

**US EPA SARA 311/312
hazardous categorization**

Sudden Release of Pressure Hazard

International inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA 8(b)), Canada (DSL/NDSL) or are exempt.

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

Legend X - Listed

16. OTHER INFORMATION

NFPA

Health	Not available
Flammability	Not available
Instability	Not available

HMIS

Health	Not available
Flammability	Not available
Physical hazards	Not available

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 Organization)
 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