SAI Global File #004008

Burlington, Ontario, Canada

GLASS CLEANER

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Identifier: 825

Other Means of Identification: Glass Cleaner

Related Part #825-500G

Recommended Use and Restriction on Use

Use: Cleaner for glass, plastic, chrome, and countertops

Uses Advised Against: Not available

Details of Manufacturer or Importer

Manufacturer

MG Chemicals 1210 Corporate Drive Burlington, Ontario L7L 5R6 CANADA

+1-800-340-0772 FAX +1-800-340-0773 E-MAIL support@mgchemicals.com www.mgchemicals.com WEB

MG Chemicals (Head Office)

9347-193 Street

Surrey, British Columbia V4N 4E7

CANADA

+1-905-331-1396 Fax +1-905-331-2682 E-MAIL info@mgchemicals.com

E-MAIL (Competent Person): sds@mqchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents) USA or CANADA—Call Verisk 3E at +1-866-519-4752 or +1-760-476-3962 (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service CANADA—Call CANUTEC collect at +1-613-996-6666 or *666 on cellular phones

SAI Global File #004008 Burlington, Ontario, Canada

GLASS CLEANER

Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

825

Criteria	Category	Signal Word	Pictograms
Gas under pressure	Liquefied gas	Warning	Gas Cylinder

Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

Label Elements

Signal Word	WARNING
Pictograms	Hazard Statements
	H280: Contains gas under pressure; may explode if heated
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, flames, and other ignition sources. No Smoking.
P251	Do not pierce or burn, even after use.
Storage	Precautionary Statements
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F].

Note: Contains 12% flammable ingredients mixed with water.

Section continued on the next page

SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Hazards Not Otherwise Classified

HCS2012 Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Simple Asphyxiant	May displace oxygen and cause rapid suffocation.	Warning	none

Section 3: Composition/Information on Ingredients

CAS#	Chemical Name	%(weight)
67-63-0	propan-2-ol	4%
75-28-5	isobutane	4%
111-76-2	2-butoxyethanol	3%
74-98-6	propane	1%

a) Remainder is deionized water

Section 4: First-Aid Measures

Exposure Condition	GHS Code/Symptoms/Precautionary Statements
IF IN EYES	P305 + P351 + P338
Immediate Symptoms	low toxicity
Response	Rinse cautiously with lukewarm water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED	P304 + P340
Immediate Symptoms	low toxicity
Response	Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN	P302 + P352
Immediate Symptoms	mild irritation
Response	IF ON SKIN: Wash with plenty of water.

Section continued on the next page

Page **3** of **13**

Chemicals

ISO 9001:2015 Quality Management System

SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Continued...

IF SWALLOWED
P301 + P330, P331, P312

Immediate Symptoms
low toxicity

Response
Rinse mouth. Do NOT induce vomiting.

If you feel unwell: Call a POISON CENTER or doctor.

Section 5: Fire-Fighting Measures

Extinguishing Media In case of fire: Use extinguishing media suitable for surrounding

materials.

Use water spray to cool containers.

Specific Hazards Aerosol container may erupt with force at temperatures above

50 °C [122 °F].

Combustion Products Produces carbon oxides (CO,CO₂).

Fire-Fighter Wear self-contained breathing apparatus and full fire-fighting

turn-out gear.

Section 6: Accidental Release Measures

Personal Protection Use personal protection recommended in Section 8.

Precautions for

Response

Keep away from extreme heat, hot surfaces, or open flames.

Environmental

Precautions

Not applicable

Containment Methods Not applicable

Cleaning Methods If necessary, wash spill area with water.

Disposal Methods Dispose of spill waste according to Section 13.

SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Section 7: Handling and Storage

Prevention Keep out of reach of children.

Keep away from heat, hot surfaces, sparks, flames, and other

ignition sources. No Smoking.

Do not pierce or burn, even after use.

Handling Wash hands thoroughly after handling.

Storage Protect from sunlight. Do not expose to temperatures exceeding

50 °C [122 °F].

Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

Chemical Name	Country	Long Term Exposure Limits	Short Term Exposure Limits
		(PEL)	(STEL)
propan-2-ol	ACGIH	200 ppm (TWA)	400 ppm
	U.S.A. OSHA PEL	400 ppm	Not established
	Canada AB	200 ppm	400 ppm
	Canada BC	200 ppm	400 ppm
	Canada ON	200 ppm	400 ppm
	Canada QC	400 ppm	500 ppm
isobutane	ACGIH	a)	Not established
alkane (C2-C4)	U.S.A. OSHA PEL	Not established	Not established
aliphatic hydrocarbon gas	Canada AB	1 000 ppm	Not established
	Canada BC	1 000 ppm	Not established
	Canada ON	800 ppm	Not established
	Canada QC	Not established	Not established
2-butoxyethanol	ACGIH	20 ppm	Not established
	U.S.A. OSHA PEL	50 ppm	Not established
	Canada AB	20 ppm	Not established
	Canada BC	20 ppm	Not established
	Canada ON	20 ppm	Not established
	Canada QC	25 ppm	Not established

Section continued on the next page



SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Continued...

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
propane	ACGIH U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	a) 1 000 ppm 1 000 ppm 1 000 ppm 1 000 ppm 1 000 ppm	Not established Not established Not established Not established Not established Not established

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from RTECS database² and data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

a) Refer to the ACGIH Appendix F: Mininam Oxygen Content for Asphyxia TLV Basis

Engineering Controls

Ventilation Keep airborne concentrations below the occupational exposure

limits (OEL).

Personal Protective Equipment

Eye protection Wear appropriate protective eyeglasses or chemical safety

goggles.

RECOMMENDATION: Use safety glasses with lateral protection

(side shields).

Skin Protection Use of protective gloves chemically resistant gloves if skin

contact is likely.

Do NOT use latex rubber, polyvinyl alcohol (PVA) or PVC gloves.

Respiratory Protection For over-limit exposures up to 10 x OEL of mist, vapors, and

spray, wear respirator such as a half-mask respirator.

RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when

not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Page **6** of **13**



SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Section 9: Physical and Chemical Properties

Physical State	Liquid in Aerosol	Lower Flammability	Not
	format	Limit	available
Appearance	Colorless	Upper Flammability Limit	Not available
Odor	Fragrant,	Vapor Pressure	Not
	alcohol-like	@20 °C	available
Odor Threshold	Not available	Vapor Density	>1 (Air =1)
pH	Not available	Relative Density @25 °C	0.98
Freezing/Melting	Not	Solubility in	Completely miscible
Point	available	Water	
Initial Boiling	≥93 °C	Partition Coefficient n-octanol/water	Not
Point ^{a)}	[199 °F]		available
Flash Point a)	≥50 °C	Auto-ignition	≥245 °C
	[≥123 °F]	Temperature b)	[≥473 °F]
Evaporation	<1	Decomposition	Not
Rate	(ButAc =1)	Temperature	available
Flammability	Non Flammable	Viscosity @40 °C	<20.5 mm ² /s

- a) Lowest component literature value, which corresponds to 5% propan-2-ol
- b) Lowest component auto-ignition literature value

Section 10: Stability and Reactivity

Reactivity Not available.

Chemical Stability Chemically stable at normal temperatures and pressures

Conditions to Temperatures above 50 °C [122 °F], open flames, and incompatible

Avoid substances

Incompatibilities oxidizing agents, strong acids

Polymerization Will not occur

Decomposition Will not decompose under normal conditions. For thermal

decomposition, see combustion products in Section 5.

SAI Global File #004008

Burlington, Ontario, Canada

825 GLASS CLEANER

Section 11: Toxicological Information

Summary of Effects and Symptoms by Routes of Exposure

Eyes Low toxicity

Skin May causes mild skin irritation.

Inhalation Low toxicity Ingestion Low toxicity Chronic Not available

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
propan-2-ol	3 600 mg/kg	12 800 mg/kg	16 000 ppm
	Rat	Rabbit	8 h Rat
isobutane	Not	Not	>570 000 ppm
	applicable	applicable	4 h Rat
2-butoxyethanol	917 mg/kg	220 mg/kg	450 ppm
	Rat	Rabbit	4 h Rat
propane	Not	Not	>800 000 ppm
	applicable	applicable	4 h Rat

Note: Toxicity data from the RTECS² and ECHA databases were consulted. The data from supplier SDS were also consulted.

Other Toxicological Effects

Skin corrosion/irritation	The 2-butoxyethano	I component is c	lassified as a skin
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irritant, but it is not present in sufficient concentration to

trigger classification.

Serious eye

Propan-2-ol and and 2-butoxyethanol are severe eye irritants, but aren't present in sufficient concentration to damage/irritation

trigger classification.

Sensitization

Based on available data, the classification criteria are not

(allergic reactions) met.

Section continued on the next page

Page **8** of **13**



SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Carcinogenicity

None of the ingredients are classified or listed as a

(risk of cancer) carcinogen by IARC, ACGIH, CA Prop 65, or NTP.

Mutagenicity Based on available data, the classification criteria are not

(risk of heritable genetic effects) met.

Reproductive Toxicity (risk to Based on available data, the classification criteria are not

sex functions) met.

Teratogenicity (risk of fetus Based on available data, the classification criteria are not

malformation) m

STOT-single exposure Propan-2-ol is known to have narcotic effects, but it is

not present in sufficient concentration to trigger

classification.

STOT-repeated exposure Based on available data, the classification criteria are not

met.

Aspiration hazard Based on available data, the classification criteria are not

met.

Section 12: Ecological Information

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (http://echa.europa.eu), and other reliable sources.

Based on available data, propan-2-ol and 2-butoxyethanol do not meet the environmental toxicant classification with LC50 and EC50 >100 mg/L.

- Propan-2-ol has a minimal LC50 96 h of 9 640 mg/L for Pimephales promelas (fathead minnow); an EC50 24 h of 5 102 mg/L Daphnia magna (water flea); and an EC50 72 h of 2 000 mg/L Desmodesmus subspicatus (green algae).
- The 2-butoxyethanol component has a minimal LC50 96 h of 220 mg/L for fish; and an EC50 24 h of 1 815 mg/L Daphnia magna (water flea).

Acute Ecotoxicity

Available toxicity data does not meet classification thresholds

Chronic Ecotoxicity

Available toxicity data does not meet classification thresholds

Biodegradability

Not available

Section continued on the next page

Page **9** of **13**

SAI Global File #004008

Burlington, Ontario, Canada

825 GLASS CLEANER

Other Effects

VOC (EPA, WHIMS, and Europe) = 9% [86 g/L] *VOC = Volatile Organic Content

Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); USA DOT 49 CFR (Parts 100 to 185) Regulations.

Sizes 1 L and under **Limited Quantity**



FOR REFERENCE ONLY UN number: UN1950

Shipping Name: AEROSOLS, non-flammable

Class: 2.2

Packing Group: Not applicable

Marine Pollutant: No

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Sizes 1 L and under **Limited Quantity**

Maximum quantity per package 30 kg Gross



FOR REFERENCE ONLY UN number: UN1950

Shipping Name: AEROSOLS, non-flammable

Class: 2.2

Packing Group: Not applicable

Marine Pollutant: No

Section continued on the next page

SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Sea

Refer to IMDG regulations.

Sizes 1 L and under Limited Quantity



FOR REFERENCE ONLY

UN number: UN1950

Shipping Name: AEROSOLS, non-flammable

Class: 2.2

Packing Group: Not applicable

Marine Pollutant: No

Note: Shipper must be appropriately <u>trained and certified</u> before involvement with the transport of dangerous goods.

Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL/NDSL.

Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

USA

Other Classifications

HMIS® RATING

HEALTH:	2
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

Section continued on the next page

Page **11** of **13**



SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45

This product contains 4% propan-2-ol (CAS# 67-63-0) which is subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, USA).

This product does not contain any listed substances in California.

Europe

RoHS (Restriction of Hazardous Substance Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

Prepared by theRegulatory Affairs Department

Date of Review 28 February 2020 Supersedes 08 May 2019

Reason for Changes: Change to emergency phone numbers.

Reference

- 1) ACGIH 2017 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2017).
- 2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

Section continued on the next page

Page **12** of **13**

N Chemicals

ISO 9001:2015 Quality Management System

SAI Global File #004008 Burlington, Ontario, Canada

825 GLASS CLEANER

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists (USA)

EC50 Half maximal effective concentration EL50 Half maximal effective loading NOELR No observable effect loading ratio

GHS Globally Harmonized System of Classification of Labeling of Chemicals

LC50 Lethal Concentration 50%

LCLo Lowest published lethal concentration

LD50 Lethal Dose 50%

PEL Permissible Exposure Limit STEL Short-Term Exposure Limit

TCLo Lowest published toxic concentration

TLV Threshold Limit Value TWA Time Weighted Average VOC Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or

problems with this product. Application notes, instructions, and FAQs

are located at www.mgchemicals.com.

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L7L 5R6 V4N 4E7

Disclaimer This safety data sheet is provided as an information resource only.

M.G. Chemicals, Ltd. believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional,

national, and international regulations.