

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 1000027353
Material name 19 OZ ECLAT GLASS & MIRROR CLNR LB 12PK
Company information Manic Sanitation
66 Rue Fraser
Riviere-du-Loup, QC G5R 1C2 Canada
Company phone General Assistance 1-800-463-4445
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 47
Expiry Date 16-Jun-2017
Product use cleaner

2. Hazards Identification

Emergency overview DANGER
Aerosol. Pressurized container may explode when exposed to heat or flame. Irritating to eyes and skin.

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Eyes Contact with eyes may cause irritation. Avoid contact with eyes.

Skin Do not get this material in contact with skin. May be harmful if absorbed through skin. May cause skin irritation.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. May cause irritation of respiratory tract.

Ingestion Exposure by ingestion of an aerosol is unlikely. Irritating. May cause nausea, stomach pain and vomiting.

Target organs 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans.

Chronic effects May be harmful if absorbed through skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Potential environmental effects May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Butane	106-97-8	1 - 5
Ethanol	64-17-5	1 - 5
Ethylene Glycol Monobutyl Ether	111-76-2	1 - 5
Propane	74-98-6	1 - 5
Other components below reportable levels		60 - 100

4. First Aid Measures

First aid procedures

Inhalation Move to fresh air. Get medical attention, if needed.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Notes to physician	Treat symptomatically.
General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties	Heat may cause the containers to explode. Ruptured cylinders may rocket.
Extinguishing media	
Suitable extinguishing media	Not available.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Protection of firefighters	
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection.
Fire fighting equipment/instructions	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not direct water at source of leak or safety devices as icing may occur. Containers should be cooled with water to prevent vapor pressure build up. Some of these materials, if spilled, may evaporate leaving a flammable residue.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
Explosion data	
Sensitivity to static discharge	Not available.
Sensitivity to mechanical impact	Not available.
Hazardous combustion products	Not available.

6. Accidental Release Measures

Personal precautions	Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the MSDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Stop leak if you can do so without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Isolate area until gas has dispersed. Ventilate the area. Should not be released into the environment. Clean up in accordance with all applicable regulations. Stop the flow of material, if this is without risk. For waste disposal, see section 13 of the MSDS.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

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, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. When using do not eat or drink. Do not use in areas without adequate ventilation. Wash thoroughly after handling. Avoid release to the environment.
-----------------	--

Storage

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Use care in handling/storage. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1000 ppm
Ethanol (CAS 64-17-5)	TWA	1880 mg/m ³
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	97 mg/m ³
		20 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Butane (CAS 106-97-8)	STEL	750 ppm
	TWA	600 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	800 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m ³
		800 ppm
Ethanol (CAS 64-17-5)	TWA	1880 mg/m ³
		1000 ppm
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	97 mg/m ³
		20 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³
		1000 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	PEL	240 mg/m3 50 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection Wear suitable protective clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Hand protection Wear protective gloves.

9. Physical & Chemical Properties**Appearance**

Physical state Gas.

Form Aerosol. Compressed gas.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH 9.1 - 10.1 estimated

Vapor pressure 80 - 100 psig @70F estimated

Vapor density Not available.

Boiling point 212 °F (100 °C) estimated

Melting point/Freezing point Not available.

Solubility (water) Not available.

Specific gravity 0.977 - 0.997

Relative density Not available.

Flash point -156.0 °F (-104.4 °C) Propellant estimated

Flammability limits in air, upper, % by volume Not available.

Flammability limits in air, lower, % by volume Not available.

Auto-ignition temperature Not available.

Evaporation rate Not available.

Partition coefficient (n-octanol/water) Not available.

Other data**Aerosol spray enclosed space**

Deflagration density > 2.52 g/cm3 Tested

Aerosol spray ignition distance < 15 cm Tested estimated

Flammability (solid, gas) Not available.

10. Chemical Stability & Reactivity Information

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Risk of explosion.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Butane (CAS 106-97-8)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l
Ethanol (CAS 64-17-5)		
<u>Acute</u>		
Inhalation		
LC50	Cat	85.41 mg/l, 4.5 Hours 43.68 mg/l, 6 Hours
	Mouse	> 60000 ppm 79.43 mg/l, 134 Minutes
	Rat	> 115.9 mg/l, 4 Hours 51.3 mg/l, 6 Hours
Oral		
LD50	Pig	> 5000 mg/kg
	Rat	10470 mg/kg
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
<u>Acute</u>		
Dermal		
LD50	Guinea pig	7.3 ml/kg, 4 Days 0.23 ml/kg, 24 Hours
	Rabbit	435 mg/kg, 24 Hours 0.68 ml/kg, 24 Hours 0.63 ml/kg
	Rat	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Rabbit	400 ppm, 7 Hours
	Rat	450 ppm, 4 Hours
Oral		
LD100	Rabbit	695 mg/kg
LD50	Dog	> 695 mg/kg
	Guinea pig	1414 mg/kg
	Mouse	1519 mg/kg

Components	Species	Test Results
Propane (CAS 74-98-6)	Rat	1746 mg/kg
Acute Inhalation LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l 658 mg/l/4h

Acute effects

Sensitization

Not classified.

Chronic effects

May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Carcinogenicity

ACGIH Carcinogens

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

3 Not classifiable as to carcinogenicity to humans.

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/irritation

Direct contact with eyes may cause temporary irritation.

Mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive effects

This product is not expected to cause reproductive or developmental effects.

Teratogenicity

Not available.

Symptoms and target organs

Direct contact with eyes may cause temporary irritation.

Synergistic materials

Not available.

12. Ecological Information

Ecotoxicological data

Product	Species	Test Results
19 OZ ECLAT GLASS & MIRROR CLNR LB 12PK		

Aquatic

Crustacea

EC50

Daphnia

13838.1602 mg/l, 48 hours estimated

Components

Species

Test Results

Ethanol (CAS 64-17-5)

Aquatic

Crustacea

EC50

Water flea (Daphnia magna)

7700 - 11200 mg/l, 48 hours

Fish

LC50

Fathead minnow (Pimephales promelas)

> 100.1 mg/l, 96 hours

Ethylene Glycol Monobutyl Ether (CAS 111-76-2)

Aquatic

Fish

LC50

Inland silverside (Menidia beryllina)

1250 mg/l, 96 hours

Ecotoxicity

Contains a substance which causes risk of hazardous effects to the environment.

Environmental effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Aquatic toxicity

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.

Persistence and degradability

No data is available on the degradability of this product.

**Bioaccumulation /
accumulation**

Partition coefficient

Butane	2.89
Ethanol	-0.31
Ethylene Glycol Monobutyl Ether	0.83
Propane	2.36

Mobility in environmental media No data available for this product.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport Information

TDG

UN number	UN1950
UN proper shipping name	AEROSOLS, non-flammable
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Packing group	If <1L: Limited Quantity
Environmental hazards	D
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

IATA

UN number	UN1950
UN proper shipping name	Aerosols, non-flammable
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Label(s)	2.2
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	2L
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Label(s)	2.2
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

IATA; IMDG; TDG



15. Regulatory Information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Controlled

WHMIS classification

A - Compressed Gas
D2B - Other Toxic Effects-TOXIC

WHMIS labeling



International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Recommended use

Use in accordance with supplier's recommendations.

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

Prepared by

Not available.