

# SAFETY DATA SHEET

## M.M. GLASS CLEANER 4-4L

Version 1.2

Revision Date 12/13/2016

Print Date 09/21/2017

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : M.M. GLASS CLEANER 4-4L

Material number : DB2254C

#### Manufacturer or supplier's details

Company :

Address :

Telephone :

#### Emergency telephone numbers

For SDS Information :

For a Medical Emergency :

For a Transportation :

Emergency

#### Recommended use of the chemical and restrictions on use

Recommended use : Cleaner

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	liquid
Colour	clear, blue
Odour	pleasant

#### GHS Classification

Flammable liquids : Category 4

#### GHS label elements

Signal word : Warning

Hazard statements : H227 Combustible liquid.

Precautionary statements : **Prevention:**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves/ eye protection/ face protection.  
**Response:**  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
**Disposal:**  
Dispose of contents/container in accordance with local regulation.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration [%]
propan-2-ol	67-63-0	>= 5 - < 10
2-butoxyethanol	111-76-2	>= 1 - < 5

### SECTION 4. FIRST AID MEASURES

- General advice : Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.  
If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Effects may be delayed, symptoms may include minor eye or skin irritation.  
Overexposure may cause mild eye or skin irritation.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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- Further information : For safety reasons in case of fire, cans should be stored separately in closed containments.  
Use a water spray to cool fully closed containers.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Keep in suitable, closed containers for disposal.

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### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid formation of aerosol.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : No smoking.  
Keep in a well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Oxidizing agents  
Do not store near acids.  
Do not freeze.

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### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis

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propan-2-ol	67-63-0	TWA	200 ppm 492 mg/m <sup>3</sup>	CA AB OEL
		STEL	400 ppm 984 mg/m <sup>3</sup>	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	400 ppm	CA BC OEL
		TWAEV	400 ppm 983 mg/m <sup>3</sup>	CA QC OEL
		STEV	500 ppm 1,230 mg/m <sup>3</sup>	CA QC OEL
		TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m <sup>3</sup>	NIOSH REL
		ST	500 ppm 1,225 mg/m <sup>3</sup>	NIOSH REL
		TWA	400 ppm 980 mg/m <sup>3</sup>	OSHA Z-1
		TWA	400 ppm 980 mg/m <sup>3</sup>	OSHA P0
		STEL	500 ppm 1,225 mg/m <sup>3</sup>	OSHA P0
		PEL	400 ppm 980 mg/m <sup>3</sup>	CAL PEL
		STEL	500 ppm 1,225 mg/m <sup>3</sup>	CAL PEL
2-butoxyethanol	111-76-2	TWA	20 ppm 97 mg/m <sup>3</sup>	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	20 ppm 97 mg/m <sup>3</sup>	CA QC OEL
		TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 240 mg/m <sup>3</sup>	OSHA Z-1
		TWA	25 ppm 120 mg/m <sup>3</sup>	OSHA P0
		PEL	20 ppm 97 mg/m <sup>3</sup>	CAL PEL

### Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200.mg/g Creatinine	ACGIH BEI

**Engineering measures** : effective ventilation in all processing areas

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### Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection  
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water  
Safety glasses
- Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.
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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : clear, blue
- Odour : pleasant
- Odour Threshold : No data available
- pH : 10.5 - 11.5
- Melting point/freezing point : No data available
- Boiling point : 100 °C
- Flash point : 61.4 °C  
Method: closed cup
- Evaporation rate : 1
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : No data available
- Relative vapour density : No data available
- Density : 0.996 g/cm<sup>3</sup>
- Solubility(ies)
- Water solubility : soluble in cold water, soluble in hot water
- Solubility in other solvents : soluble
- Partition coefficient: n-octanol/water : No data available
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Auto-ignition temperature : not determined  
Thermal decomposition : No data available  
Viscosity  
Viscosity, kinematic : 3.6 mm<sup>2</sup>/s (20 °C)

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### SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable  
Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : Vapours may form explosive mixture with air.  
No decomposition if stored and applied as directed.  
Conditions to avoid : Heat, flames and sparks.  
Incompatible materials : Strong oxidizing agents  
Acids  
Hazardous decomposition products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Potential Health Effects

Aggravated Medical Condition : None known.  
Symptoms of Overexposure : Effects may be delayed, symptoms may include minor eye or skin irritation.

#### Carcinogenicity:

##### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Acute toxicity

##### Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Calculation method

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Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

### Components:

**propan-2-ol:**  
Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg  
Method: Calculation method

### **Skin corrosion/irritation**

#### Product:

Remarks: May cause skin irritation and/or dermatitis.

### **Serious eye damage/eye irritation**

#### Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

### **Respiratory or skin sensitisation**

No data available

### **Germ cell mutagenicity**

No data available

### **Carcinogenicity**

No data available

### **Reproductive toxicity**

No data available

**propan-2-ol:**  
**2-butoxyethanol:**

### **STOT - single exposure**

No data available

### **STOT - repeated exposure**

No data available

### **Aspiration toxicity**

No data available

### **Further information**

#### Product:

Remarks: No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

No data available

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### Persistence and degradability

No data available

### Bioaccumulative potential

#### Product:

Partition coefficient: n-octanol/water : Remarks: No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

#### Product:

Additional ecological information : No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

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## SECTION 14. TRANSPORT INFORMATION

Transportation Regulation (TDG) / Règlement Pour Le Transport (TMD): (Canada):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL



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The product as delivered to the customer conforms to packaging requirements for shipment by road under Transport Dangerous Goods (TDG) Canada regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

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### SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

**The components of this product are reported in the following inventories:**

**TSCA**                                 On TSCA Inventory  
**DSL**                                     All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

**Inventory Acronym and Validity Area Legend:**

TSCA (USA), DSL (Canada), NDSL (Canada)

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### SECTION 16. OTHER INFORMATION

WHMIS - GHS Label Information:

Signal word                             : **Warning:**  
Hazard statements                     : Combustible liquid.  
Precautionary statements           :  
**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/ eye protection/ face protection.  
**Response:** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
**Disposal:** Dispose of contents/container in accordance with local regulation.

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This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.