

# MICHELIN GLASS CLEANER

## SAFETY DATA SHEET

According to Canada's Hazardous Products Regulations (HPR) SOR/2015-17

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

Chemical Name Mixture  
CAS No. Mixture  
Trade Name MICHELIN GLASS CLEANER  
Product Code 6000

**Relevant identified uses of the substance or mixture and uses advised against**

Identified Use(s) Cleaning product  
Uses Advised Against None

Company Identification Kleen-Flo Tumbler Ind. Ltd.  
75 Advance Blvd., Brampton, ON  
L6T 4N1

Telephone 905-793-4311  
Fax 905-793-4318

**Emergency telephone number**

Emergency Phone No. **CANUTEC: 613-996-6666**

### SECTION 2: HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

HPR/WHIMIS 2015/GHS Classification Liquefied gas

**Label elements**

Hazard Symbol



**WARNING**

Signal Word(s)

Hazard Statement(s)

Contains gas under pressure; may explode if heated.

Precautionary Statement(s)

Protect from sunlight and store in well-ventilated place. Do not expose to temperatures exceeding 50°C/ 122°F.

**Other hazards**

None

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt. *	CAS No.	Hazard classification
Propane	1 - 5	74-98-6	Flam. Gas 1, H220 Press. Gas (*)
Butane	1 - 5	106-97-8	Flam. Gas 1, H220 Press. Gas (*)
Isopropanol	1 - 5	67-63-0	Flam. Liq. 2; H225 Eye Irrit. 2; H319
2-Butoxyethanol	1 - 5	111-76-2	Acute. Tox. 4; H302, H312, H332 Skin Irrit. 2; H315 Eye Irrit. 2a; H319
Aqua ammonia	0.1-1	1336-21-6	Skin Irrit. 2; H315 Eye Irrit. 2; H319

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**Additional Information** - None

\* The exact percentage withheld as a trade secret.

## SECTION 4: FIRST AID MEASURES



### Description of first aid measures

Inhalation	Move person to fresh air. If breathing is laboured, administer oxygen. If symptoms develop, obtain medical attention.
Skin Contact	Wash affected skin with soap and water. If symptoms develop, obtain medical attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation develops and persists, get medical attention.
Ingestion	Immediately call a POISON CENTER or doctor/physician. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed** None anticipated

**Indication of any immediate medical attention and special treatment needed** None anticipated

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

-Suitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or water spray.
-Unsuitable Extinguishing Media	Do not use water jet.

**Special hazards arising from the substance or mixture** Pressurised container: May burst if heated

**Advice for fire-fighters** A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** Avoid contact with skin and eyes.

**Environmental precautions** Prevent liquid entering sewers, basements and workpits.

**Methods and material for containment and cleaning up** Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

**Reference to other sections** None  
**Additional Information** None

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling** Use product in a well-ventilated area only. Avoid contact with skin and eyes. Ground/bond container and receiving equipment.

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## Conditions for safe storage, including any incompatibilities

-Storage temperature	Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
-Incompatible materials	This product should be stored away from sources of strong heat or oxidising chemicals.
<b>Specific end use(s)</b>	Cleaning product

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		OEL (Canada)	TLV (ACGIH)	OEL (Canada)	TLV (ACGIH)	
n-Butane	106-97-8	-----	250 ppm	-----	-----	-----
Propane	74-98-6	1000 ppm	Aspyx.#	-----	-----	#
Isopropanol	67-63-0	200 ppm	-----	500 ppm	-----	-----
2-Butoxyethanol	111-76-2	20 ppm	20 ppm	-----	-----	-----
Ammonia	7664-41-7	25 ppm	25 ppm	35 ppm	35 ppm	-----

\*Assure minimum oxygen content of work atmosphere.

### Recommended monitoring method

NIOSH 1500 (hydrocarbons, B.P. 36 - 216 °C); NIOSH 1400 (Alcohols I); NIOSH 1403 (Alcohols IV).

### Exposure controls

#### Appropriate engineering controls

Use only with adequate ventilation to keep exposures (airborne levels of dust, fume, vapour etc) below recommended exposure limits.

#### Personal protection equipment

Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber).

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not normally required.

### Environmental Exposure Controls

None known

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance	Liquid / Liquefied gas
Color.	Clear
Odour	Not available
Odour Threshold (ppm)	Not available
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available

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Boiling point/boiling range (°C):	Not available
Flash Point (°C)	Non-flammable
Evaporation Rate	Not available
Flammability (solid, gas)	Non-flammable
Explosive Limit Ranges	Not applicable
Vapour pressure (Pascal)	Not available
Vapour Density (Air=1)	Not available
Density (g/ml)	Not available
Solubility (Water)	Not available
Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	Non-flammable
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	<20
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
<b>Other information</b>	Not available

## SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Stable under normal conditions.
<b>Chemical stability</b>	Stable.
<b>Possibility of hazardous reactions</b>	None anticipated.
<b>Conditions to avoid</b>	Avoid contact with heat and ignition sources.
<b>Incompatible materials</b>	Strong oxidising agents
<b>Hazardous decomposition product(s)***</b>	None known

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact

### Mixtures

Acute toxicity	LD50 >5000 mg/kg-bw
Irritation / Corrosivity	Causes serious eye irritation.

### Substances in preparations / mixtures

Propane (CAS# 74-98-6):

<b>Acute toxicity</b>	Inhalation: LC50 = 1237 mg/L (2-hr, mouse, gas)
<b>Irritation/Corrosivity</b>	No evidence of irritant effects from normal handling and use.
<b>Sensitisation</b>	It is not a skin sensitizer.
<b>Repeated dose toxicity</b>	NOAEC: $\geq 19678$ mg/m <sup>3</sup> (28-day, rat, Systemic effects) LOAEC: 21641 mg/m <sup>3</sup> (28-day, rat, effects: Body weight)
<b>Carcinogenicity</b>	No data. It is unlikely to present a carcinogenic hazard to man.
<b>Mutagenicity</b>	There is no evidence of mutagenic potential.
<b>Reproductive toxicity</b>	None anticipated

## SECTION 12: ECOLOGICAL INFORMATION

### Aquatic toxicity:

Short term	LC50 (96 hour): >100 mg/L ( <i>Fish</i> )
Long Term	NOAEC (28 days): >100 mg/l ( <i>Fish</i> ) QSAR

## SECTION 13: DISPOSAL CONSIDERATIONS

<b>Waste treatment methods</b>	Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.
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## SECTION 14: TRANSPORT INFORMATION

	<b>Land transport (TDG)</b>	<b>Sea transport (IMDG)</b>	<b>Air transport (ICAO/IATA)</b>
<b>UN number</b>	1950	1950	1950
<b>Proper Shipping Name</b>	Aerosols, non-flammable	Aerosols, non-flammable	Aerosols, non-flammable
<b>Transport hazard class(es)</b>	2.2	2.2	2.2
<b>Packing group</b>	Not applicable	Not applicable	Not applicable
<b>Environmental hazards</b>	None assigned	None assigned	None assigned
<b>Special precautions for user</b>	None assigned	None assigned	None assigned

This product is exempted under TDG section 1.17 as limited quantity and can be shipped as limited quantity.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable

## SECTION 15: REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

This product has been classified in accordance to CPR Section 12 and the MSDS contains all the information required by the CPR.

Canada (DSL/NDSL) - All chemicals listed.

## SECTION 16: OTHER INFORMATION

**The following sections contain revisions or new statements:** 1-16.

**Date of preparation:** April 18, 2017

**Guidelines for SDS use:** The product described in this SDS is a consumer product. It is safe for use by consumers as described on the product label under normal, foreseeable conditions. This SDS is designed to provide additional safety and handling information.

**Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:**

**Hazard Statement(s)**

- H220: Extremely flammable gas.
- H225: Highly flammable liquid and vapour.
- H301: Toxic if swallowed.
- H302: Harmful if swallowed.
- H311: Toxic in contact with skin.
- H312: Harmful in contact with skin.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H330: Fatal if inhaled.
- H331: Toxic if inhaled.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H370: Causes damage to organs.

**Training advice:** None.

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