

Material Safety Data Sheet



QC 52 GLASS CLEANER

Section 1. Chemical product and company identification

Trade name : QC 52 GLASS CLEANER
Product use : Glass Cleaner
Supplier : Ecolab Co.
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326
Code : 901571-02
Date of issue : 19-July-2007

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, information on ingredients

<u>Name</u>	<u>CAS number % by weight</u>	
propan-2-ol	67-63-0	15 - 40
2-butoxyethanol	111-76-2	10 - 30
2-propanol, 1-propoxy-ethanol	1569-01-3	10 - 30
	64-17-5	0.1 - 1

Section 3. Hazards identification

Physical state : Liquid. [Liquid.]
Emergency overview : WARNING!
FLAMMABLE LIQUID AND VAPOUR.
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
HARMFUL IF SWALLOWED. MAY BE FATAL IF SWALLOWED. Aspiration hazard if swallowed. Can enter lungs and cause damage.
Can cause central nervous system (CNS) depression.
Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion
Potential acute health effects
Eyes : Moderately irritating to eyes.
Skin : Moderately irritating to the skin.
Inhalation : Moderately irritating to the respiratory system. High vapour concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.
Ingestion : Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage. Ingestion may cause nausea, weakness and central nervous system effects.

See toxicological information (section 11)

Section 4. First-aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
Skin Contact : Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation : If inhaled, remove to fresh air.

Ingestion : Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately.

Section 5. Fire-fighting measures

Auto-ignition temperature : Not available.
Flash point : 25.5556 °C (Closed cup)
Flammable limits
Upper: Not available.
Lower: Not available.
Products of combustion : Not available.
Fire-fighting media and instructions : In case of fire, use water spray (fog), foam, dry chemical, or CO₂.

Dyke liquid for later disposal.

Flammable liquid and vapour. Vapour may cause flash fire. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Risk of explosion of the product in the presence of mechanical impact: Not available.

Risk of explosion of the product in the presence of static discharge: Not available.

Section 6. Accidental release measures

Personal Precautions : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.
Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dyke spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

Handling : Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapour or mist. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Wash thoroughly after handling.
Storage : Keep out of the reach of children. Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
 Store between the following temperatures: 0 and 40°C

Section 8. Exposure controls, personal protection

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits.

Personal protection :

Eyes : Eye protection recommended.
Hands : Use chemical-resistant, impervious gloves.
Skin : No protective equipment is needed under normal use conditions.
Respiratory : Avoid breathing vapours, spray or mists.

Name	Exposure limits
propan-2-ol	ACGIH TLV (United States, 1/2006). STEL: 400 ppm 15 minute(s). TWA: 200 ppm 8 hour(s).
2-butoxyethanol	ACGIH TLV (United States, 1/2006). TWA: 20 ppm 8 hour(s).
ethanol	ACGIH TLV (United States, 1/2006). TWA: 1880 mg/m ³ 8 hour(s). TWA: 1000 ppm 8 hour(s).

Section 9. Physical and chemical properties

Physical state	: Liquid. [Liquid.]
Colour	: Blue.
Odour	: Alcohol-like.
pH	: 7.65 [Conc. (% w/w): 100%]
Boiling/condensation point	: Not available.
Melting/freezing point	: Not available.
Specific gravity	: 0.916
Vapour pressure	: Not available.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK_{ow}	: Not available.
Solubility	: Easily soluble in cold water, hot water.

Section 10. Stability and reactivity

Stability	: The product is stable.
Conditions of instability	: Not available.
Reactivity	: Not available.
Hazardous Decomposition Products	: Not available.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Moderately irritating to eyes.
Skin	: Moderately irritating to the skin.
Inhalation	: Moderately irritating to the respiratory system. High vapour concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.
Ingestion	: Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage. Ingestion may cause nausea, weakness and central nervous system effects.
Irritancy of Product	: Hazardous by WHMIS criteria.

Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: No known significant effects or critical hazards.
Reproductive effects	: No known significant effects or critical hazards.
Sensitization to Product	: No known significant effects or critical hazards.
Synergistic products (toxicologically)	: Not available.

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Route</u>	<u>Result</u>	<u>Species</u>
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propan-2-ol	LD50	Dermal	12800 mg/kg	Rabbit
	LD50	Oral	6410 mg/kg	Rabbit
	LD50	Oral	5000 mg/kg	Rat
	LD50	Oral	3600 mg/kg	Mouse
2-propanol, 1-propoxy-	LD50	Dermal	3550 mg/kg	Rabbit
	LD50	Oral	2504 mg/kg	Rat
2-butoxyethanol	LD50	Dermal	220 mg/kg	Rabbit
	LD50	Oral	1167 mg/kg	Mouse
	LD50	Oral	917 mg/kg	Rat
	LD50	Oral	470 mg/kg	Rat
	LD50	Oral	320 mg/kg	Rabbit
	LD50	Oral	300 mg/kg	Rabbit
	LD50	Oral	1230 mg/kg	Mouse
ethanol	LD50	Oral	7 g/kg	Rat
	LD50	Oral	7060 mg/kg	Rat

Target organs : Contains material which causes damage to the following organs: blood, kidneys, liver, lymphatic system, upper respiratory tract, central nervous system (CNS).

Section 12. Ecological information

Ecotoxicity

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
propan-2-ol	Fish	48 hours	Acute EC50 10000 mg/L
	Fish	96 hours	Acute LC50 10400 mg/L
	Fish	96 hours	Acute LC50 11130 mg/L
	Fish	96 hours	Acute LC50 9640 mg/L
	Fish	96 hours	Acute LC50 6550 mg/L
	Fish	96 hours	Acute LC50 >1400 mg/L
	Fish	96 hours	Acute LC50 >100 mg/L
2-butoxyethanol	Fish	96 hours	Acute LC50 1490 mg/L
ethanol	Fish	96 hours	Acute LC50 13000 mg/L
	Fish	96 hours	Acute LC50 >100 mg/L

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
TDG Classification	UN1993	FLAMMABLE LIQUID, N.O.S. (Isopropanol , Propylene glycol n-propyl ether)	3	III	<u>Passenger Carrying Road or Rail Index</u> 60 <u>Special provisions</u> 16

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

WHMIS : Class B-2: Flammable liquid
Class D-2B: Material causing other toxic effects (Toxic).

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

Section 16. Other information

Date of issue : 19-July-2007.
Responsible name : Regulatory Affairs
Date of previous issue : 24-May-2007.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.