



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name CONCENTRATED GLASS CLEANER
FREEZE FREE

Product use Glass Cleaner.

Product code 2335

Date of issue 10/09/15 **Supersedes** 11/01/12

Emergency Telephone Numbers

For MSDS Information:

Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

Prepared By

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Section 2. Hazards Identification

Emergency overview

WARNING !

FLAMMABLE LIQUID AND VAPOR.

Keep away from heat, sparks and flame. Do not breathe vapor or mist. Avoid contact with skin and clothing. Contains material that may cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Absorbed through skin. Inhalation. Eye contact

Eyes

May cause eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin

May cause skin irritation. Skin inflammation is characterized by itching, scaling, or reddening. Product may be dermal absorbed. Defatting properties, may aggravate an existing dermatitis

Inhalation

Harmful by inhalation. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Pre-existing respiratory disorders may be aggravated by over-exposure to this product.

Ingestion

MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. Inhalation and ingestion may cause drowsiness, dizziness, incoordination and other effects of intoxication. Can cause central nervous system (CNS) depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Chronic effects

Contains material which may cause damage to the following organs: kidneys, lungs, liver, heart, brain, peripheral nervous system, eyes, central nervous system (CNS), pancreas. Chronic and subacute exposure to this material predominantly affects the central nervous system. Symptoms observed may be the same as those for acute overexposure and may include: visual disturbances, ataxia, staggering gait, weakness, tremors, vertigo, drowsiness, confusion, personality changes, impaired speech or hearing and blurred vision progressing to complete blindness. These symptoms may be delayed in onset and continue for some time after exposure has stopped. Methanol is eliminated from the body very slowly therefore daily exposure can have cumulative effects including optic nerve damage.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients**Name of Hazardous Ingredients****CAS number****% by Weight**

METHANOL; methyl alcohol; wood alcohol; columbia spirits

67-56-1

40 - 70

Section 4. First Aid Measures**Eye Contact**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin Contact

Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion

Drink one or two glasses of water and induce vomiting by gently touching the back of the throat with finger. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures**Flash Point**

Closed cup: 25°C (77°F)
[Tagliabue.]

Flammable Limits

Not available.

Flammability

Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Auto-ignition Temperature**Fire-Fighting Procedures**

Use dry chemical or CO₂. Wear special protective clothing and positive pressure, self-contained breathing apparatus. Cool containing vessels with flooding quantities of water until well after fire is out.

Fire hazard

Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors 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.

Products of Combustion

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Explosion hazard

Not available.

Section 6. Accidental Release Measures**Spill Clean up**

Put on appropriate personal protective equipment (see section 8). Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage**Handling**

Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Use non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly after handling.

Storage

Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection**Product name**

methanol

Exposure limits

CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.

8 hrs OEL: 262 mg/m³ 8 hour(s).

8 hrs OEL: 200 ppm 8 hour(s).

15 min OEL: 250 ppm 15 minute(s).

15 min OEL: 328 mg/m³ 15 minute(s).

CA British Columbia Provincial (Canada, 9/2010). Absorbed through skin.

TWA: 200 ppm 8 hour(s).

STEL: 250 ppm 15 minute(s).

CA Ontario Provincial (Canada, 7/2010). Absorbed through skin.

TWA: 200 ppm 8 hour(s).

TWA: 262 mg/m³ 8 hour(s).

STEL: 250 ppm 15 minute(s).

STEL: 328 mg/m³ 15 minute(s).

CA Quebec Provincial (Canada, 6/2008). Absorbed through skin.

TWA EV: 200 ppm 8 hour(s).

TWA EV: 262 mg/m³ 8 hour(s).

STEV: 250 ppm 15 minute(s).

STEV: 328 mg/m³ 15 minute(s).**Personal Protective Equipment (PPE)****Eyes**

Recommended: Splash goggles.

**Hands and Body**Recommended: Chemical-resistant gloves. Neoprene Nitrile Viton
Chemical-resistant apron.**Respiratory**

Recommended: Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Wear appropriate respirator when ventilation is inadequate. Approved/certified respirator with organic vapor cartridge.

Section 9. Physical and Chemical Properties**Physical State**

Liquid. [Thin liquid]

Color Blue.**pH**

10.1

Odor Not available.**Boiling Point**

66°C (150.8°F)

Vapor Pressure 0.13 kPa (0.96 mm Hg)**Specific Gravity**

0.93

Vapor Density 1.11 [Air = 1]**Solubility**

Easily soluble in the following materials: cold water and hot water.

Evaporation Rate 3.5 (butyl acetate = 1)**Freezing Point****VOC (Consumer)** 50.8 %**Section 10. Stability and Reactivity****Stability and Reactivity**

The product is stable.

Incompatibility

Reactive or incompatible with the following materials: oxidizing materials and acids.

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information**Carcinogenicity** Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.**Acute Toxicity****Product/ingredient name**

methanol

Result**Species****Dose****Exposure**

LC50 Inhalation Gas.

Rat

145000 ppm

LC50 Inhalation Gas.

Rat

64000 ppm

LC50 Inhalation Vapor

Rat

64000 ppm

LD50 Dermal

Rabbit

15800 mg/kg

LD50 Oral

Rat

5600 mg/kg

LD50 Oral

Rat

5628 mg/kg

Section 12. Ecological Information**Environmental Effects**

No known significant effects or critical hazards.

Aquatic Ecotoxicity

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|-------------------|----------------------------|---|
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|----------|---|--------------------------------------|--|----------|
| methanol | - | Acute EC50 16.912 mg/L Marine water | Algae - Green algae - Ulva pertusa | 96 hours |
| | - | Acute LC50 2500000 ug/L Marine water | Crustaceans - Common shrimp, sand shrimp - Crangon crangon - Adult | 48 hours |
| | - | Acute LC50 3289 mg/L Fresh water | Daphnia - Water flea - Daphnia magna - Neonate - <24 hours | 48 hours |
| | - | Acute LC50 >100000 ug/L Fresh water | Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g | 96 hours |

Section 13. Disposal Considerations



Waste Information

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream

Code: D001
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|------------------------|-----------|--|---------|-----|---|--|
| TDG Classification | UN1992 | FLAMMABLE LIQUID, TOXIC, N.O.S. (Methanol) | 3 (6.1) | II |   | <u>Explosive Limit and Limited Quantity Index</u> 1 |
| IMDG Class | | | | | | - |

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information

Canada

WHMIS (Canada)

Class B-2: Flammable liquid
Class D-1A: Material causing immediate and serious toxic effects (Very 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

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.