



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name MUUP CONCENTRATED GLASS
Product use Glass Cleaner.
Product code 1191
Date of issue 03/02/12 **Supersedes** 05/13/09

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

DANGER !

FLAMMABLE LIQUID AND VAPOR.

Corrosive to eyes. Irritating to skin. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not get in eyes or on skin or 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. Wash thoroughly after handling.

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

Dermal contact. Eye contact. Inhalation.

Eyes

Corrosive to eyes. Liquid in eye may cause irritation with possible damage if not rinsed immediately. Inflammation of the eye is characterized by redness, watering and itching.

Skin

Irritating to skin. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation

May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. 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 cause burns to mouth, throat and stomach. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic effects

Contains material which may cause damage to the following organs: kidneys, liver, ears. Prolonged or repeated contact may dry skin and cause irritation.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol	67-63-0	10 - 30
TETRASODIUM ETHYLENEDIAMINE TETRAACETATE; ethylenediamine tetraacetic acid; tetrasodium salt	64-02-8	1 - 5

Section 4. First Aid Measures

Eye Contact

Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Skin Contact

Get medical attention immediately. Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. 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. Get medical attention.

Ingestion Aspiration hazard if swallowed. Can enter lungs and cause damage. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.

Section 5. Fire Fighting Measures

Flash Point Closed cup: 29°C (84.2°F)
[Tagliabue.]

Flammable Limits Not available.

Flammability Highly 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, CO₂, water spray (fog) or foam. 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. Runoff to sewer may create fire or explosion hazard.

Products of Combustion carbon oxides (CO, CO₂) and other unidentified organic compounds

Explosion hazard Not available.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see section 8). 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. 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. Eliminate all ignition sources. 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). 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. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name

propan-2-ol

Exposure limits

CA Alberta Provincial (Canada, 4/2009).

15 min OEL: 984 mg/m³ 15 minute(s).

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

15 min OEL: 400 ppm 15 minute(s).

8 hrs OEL: 492 mg/m³ 8 hour(s).

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

TWA: 200 ppm 8 hour(s).

STEL: 400 ppm 15 minute(s).

CA Ontario Provincial (Canada, 7/2010).

TWA: 200 ppm 8 hour(s).

STEL: 400 ppm 15 minute(s).

CA Quebec Provincial (Canada, 6/2008).

TWAEV: 400 ppm 8 hour(s).

TWAEV: 983 mg/m³ 8 hour(s).

STEV: 500 ppm 15 minute(s).

STEV: 1230 mg/m³ 15 minute(s).

Personal Protective Equipment (PPE)

Eyes Recommended: Safety glasses.

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



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. If concentrations exceed recommended exposure levels, wear an approved/certified respirator until engineering controls are achieved.

Section 9. Physical and Chemical Properties

Physical State	Liquid. [Clear. Thin liquid]	Color	Blue.
pH	8 -8.5	Odor	Pleasant. [Slight]
Boiling Point	95°C (203°F)	Vapor Pressure	Not available.
Specific Gravity	0.98	Vapor Density	Not available.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	1 (Water = 1)
Freezing Point	-15°C (5°F)	VOC (Consumer)	12.8%

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

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	Result	Species	Dose	Exposure
propan-2-ol	LC50 Inhalation Vapor	Rat	16000 ppm	4 hours
	LD50 Dermal	Rabbit	5030 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LD50 Oral	Rat	5045 mg/kg	-

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity

propan-2-ol	-	Acute LC50 1400000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	-	Acute LC50 >1400000 ug/L	Fish - Western mosquitofish - Gambusia affinis - 20 to 30 mm	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 Classification: Ignitable hazardous waste.

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	UN 1993	FLAMMABLE LIQUID, N.O.S. (Isopropyl Alcohol)	3	III		Explosive Limit and Limited Quantity Index 5
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-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

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.