



Safety Data Sheet

73400 GLASS CLEANER

Section 1. Product and Company Identification

Product Name: 73400 GLASS CLEANER **Other Means of Identification:** Not applicable

Product Use: RTU Glass Cleaner **Restrictions On Use:** For industrial, institutional and professional use

Company: TRI CLEAN **Address:** 675 Progress Avenue, Kingston, Ontario K7M 0C7
Telephone: (613) 384-5331 **Fax:** (613) 384-9290

Emergency Telephone Number: 1-888-CAN-UTEC (226-8832)

Section 2. Hazards Identification

GHS Classification: Flammable Liquid - Category 4
Eye Irritant - Category 2A
Skin Irritant - Category 2

GHS Label Elements:

Hazard Pictograms:



Signal Word:

Warning

Hazard Statements:

Combustible liquid.
Causes serious eye irritation.
Causes skin irritation.

Precautionary Statements

Prevention:

Keep away from flames and hot surfaces. No smoking. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/ attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs, get medical attention. IF SWALLOWED: get medical attention if you feel unwell. IN CASE OF FIRE: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other Hazards:

None known.

Section 3. Composition / Information on Ingredients

Pure Substance / Mixture: Mixture

<u>Chemical Name</u>	<u>CAS#</u>	<u>Concentration (% by Weight)</u>
Ethanol	64-17-5	3-7
Methanol	67-56-1	<1

Section 4. First Aid Measures

Eye Contact: Immediately flush with plenty of cool running water. Get medical attention if irritation persists.

Skin Contact: Rinse with plenty of running water. Get medical attention if irritation persists.

Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Inhalation: Remove to fresh air and get medical attention if symptoms occur.

Most Important Symptoms/Effects, Acute and Delayed

Potential Acute Health Effects

Eye Contact: Causes serious eye irritation.

Skin Contact: Causes skin irritation.

Ingestion: No known significant effects or critical hazards under normal use.

Inhalation: No known significant effects or critical hazards under normal use.

Over-Exposure Signs/Symptoms

Eye Contact: Redness / pain / irritation.

Skin Contact: Redness / irritation.

Ingestion: No symptoms known or expected.

Inhalation: No symptoms known or expected.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary

Notes to Physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific Treatments: No specific treatment.

First-Aider Protection: No special precautions are necessary for first aid responders. No action shall be taken involving any personal risk without suitable training.

See Toxicological Information (Section 11) for more detailed information on health effects and symptoms.

Section 5. Fire-Fighting Measures

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: High volume / solid water jet.

Specific Hazards During Fire-fighting: Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.

Hazardous Combustion Products: Decomposition products may include carbon oxides, nitrogen oxides, sulfur oxides, phosphorus oxides.

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

Fire-Fighter Special Precautions: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk without suitable training. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Remove all sources of ignition. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Methods and Materials for Containment and Cleaning Up

Small spill Eliminate all ignition sources if safe to do so. Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill Eliminate all ignition sources if safe to do so. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. See Section 13 for additional disposal information.

Environmental Precautions

Do not allow contact with soil, surface or ground water.

Section 7. Handling and Storage

Precautions for Safe Handling

Protective Measures: Put on appropriate personal protective equipment (see Section 8).

Advice on Safe Handling: Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Open container carefully as content may be under pressure. Wash hands thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See Section 8 for additional information on hygiene measures.

Conditions for Safe Storage: Keep away from heat and sources of ignition. Keep out of reach of children. Keep container tightly closed. Store in suitably labelled 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.

Section 8. Exposure Controls / Personal Protection

Components with Workplace Control Parameters

Ingredient	List Name	TWA (8 hours)			STEL (15 minutes)			Ceiling			Notations
		ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
Ethanol	US ACGIH 2/2010	200	-	-	400	-	-	-	-	-	-
	AB 4/2009	200	492	-	400	984	-	-	-	-	-
	BC 9/2010	200	-	-	400	-	-	-	-	-	-
	ON 7/2010	200	-	-	400	-	-	-	-	-	-
	QC 6/2008	400	983	-	500	1230	-	-	-	-	-
Methanol		200	-	-	250	-	-	-	-	-	-

Appropriate Engineering Controls

Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal Protective Equipment

- Eye Protection:** Safety glasses with side shields.
- Hand Protection:** Wear chemical resistant, impervious gloves. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin Protection:** Wear other protective equipment / clothing as necessary to prevent skin contact.
- Respiratory Protection:** No special protective equipment required under normal use conditions.
- Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. See Section 7.

Section 9. Physical and Chemical Properties

Appearance:

Physical State:	Liquid
Colour :	Clear blue
Odour:	Lemon / alcohol
Odour Threshold:	No data available
pH:	7 – 8.5
Melting Point/Freezing Point :	No data available
Initial Boiling Point/Boiling Range:	95°C
Flash Point (Closed Cup):	60°C
Evaporation Rate:	No data available
Flammability (Solid, Gas):	Not applicable (liquid)
Upper Explosive (Flammable) Limit :	No data available
Lower Explosive (Flammable) Limit :	No data available
Vapour Pressure:	No data available
Vapour Density:	No data available
Relative Density:	0.98
Solubility:	Soluble in water
Partition Coefficient (n-octanol/water):	No data available
Auto-Ignition Temperature:	No data available
Decomposition Temperature:	No data available
Viscosity:	<25 cps

Section 10. Stability and Reactivity

Reactivity:	No specific test data related to reactivity available for this product or its ingredients
Chemical stability:	Stable under normal conditions
Possibility of Hazardous Reactions:	Under normal storage and use conditions, hazardous reactions will not occur
Conditions to Avoid:	Heat, flames and sparks
Incompatible Materials:	None known
Hazardous Decomposition Products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Decomposition products during combustion may include carbon oxides, nitrogen oxides, sulfur oxides, phosphorus oxides.

Section 11. Toxicological Information

Information on Likely Routes of Exposure: Eye contact, Skin contact, Ingestion, Inhalation

Potential Acute Health Effects

Eye Contact:	Causes serious eye irritation.
Skin Contact:	Causes skin irritation.
Ingestion:	No known significant effects or critical hazards under normal use.
Inhalation:	No known significant effects or critical hazards under normal use.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact:	Redness / pain / irritation.
Skin Contact:	Redness / irritation.
Ingestion:	No symptoms known or expected.
Inhalation:	No symptoms known or expected.

Delayed and Chronic Effects from Short and Long Term Exposure: No known significant effects or critical hazards.

Toxicity

Product Acute Oral Toxicity Estimate:	> 5,000 mg/kg
Product Acute Dermal Toxicity Estimate:	> 5,000 mg/kg
Product Acute Inhalation Toxicity Estimate:	No data available
Aspiration Toxicity:	No data available
Respiratory or Skin Sensitization:	No data available
Carcinogenicity:	No known significant effects or critical hazards
Reproductive Toxicity:	No known significant effects or critical hazards
Mutagenicity:	No known significant effects or critical hazards
Teratogenicity:	No known significant effects or critical hazards
Developmental Effects:	No known significant effects or critical hazards
Specific Target Organ Toxicity (single exposure):	No known significant effects or critical hazards
Specific Target Organ Toxicity (repeated exposure):	No known significant effects or critical hazards

Toxicity Data for Ingredients

Ingredient	Test	Route	Result	Species
Ethanol	LD ₅₀	Oral	7000 mg/kg	Rat
	LD ₅₀	Oral	10.5 mL/kg	Mouse
	LD ₅₀	Oral	15010 mg/kg	Rat
	LC ₅₀	Inhalation	124700 mg/m ³	Rat
	LC ₅₀	Inhalation	5900 mg/m ³	Rat
	LC ₅₀	Inhalation	20000 ppm	Rat
Methanol	LD ₅₀	Oral	5.6-13 g/kg	Rat
	LD ₅₀	Inhalation	64000 ppm	Rat

Section 12. Ecological Information

Ecotoxicity

Product/Ingredient Name	Result	Species	Exposure
Ethanol, denatured	Acute LC50 14200 mg/l	Fish - Pimephales promelas	96 hours
	Acute LC50 13000 mg/l	Fish - Salmo gairdneri (Oncorhynchus mykiss)	96 hours
	Acute EC50 9300 mg/l	Daphnia - Daphnia magna	48 hours

Persistence and Degradability

Ethanol, denatured – readily biodegradable in water.

Bioaccumulative Potential

Ingredient Name	LogP _{ow}	Potential
Ethanol, denatured	-0.31	Low

Mobility in Soil

No data available

Other Adverse Effects

No known significant effects or critical hazards

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and any local, provincial/state and federal regulations. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Empty containers may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land Transport (TDG)

Not classified as dangerous goods

Sea Transport (IMDG/IMO)

Not classified as dangerous goods

Section 15. Regulatory Information

Canadian Domestic Substances List (DSL)

All components of this product are listed or exempted.

United States TSCA Inventory

All components of this product are listed or exempted.

Hazardous Material Information System:	Health: 1	Flammability: 1	Physical Hazards: 0	
National Fire Protection Association:	Health: 1	Flammability: 1	Instability: 0	Special Hazard: -

Section 16. Other Information

Prepared By: Regulatory Affairs **Telephone:** (416) 744-0040 **Date:** August 8, 2016

To the best of our knowledge, the information provided in this Safety Data Sheet is accurate at the date of its publication. However, neither the above-named manufacturer or 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.