



# MATERIAL SAFETY DATA SHEET

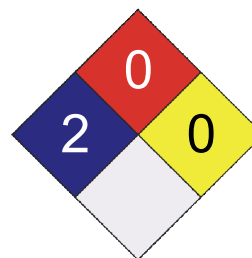
## 1. Product and Company Identification

**Product Name** Crystal Clear  
**CAS #** Mixture  
**Product Use** Glass Cleaner  
**Manufacturer** Frank's Maintenance Products Inc.  
 1299 Strasburg Rd  
 Kitchener, Ontario  
 N2R 1H2 Canada  
 Phone (519) 748-4433  
 Fax (519) 748-5397  
 (613) 996-6666

### CANUTEC

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 2
Flammability	0
Physical Hazard	0
Personal Protection	B



## 2. Hazards Identification

### Emergency Overview

WARNING  
EYE AND SKIN IRRITANT.

### Potential short term health effects

#### Routes of exposure

Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

#### Eyes

May cause irritation.

#### Skin

May cause irritation. This product may be harmful if it is absorbed through the skin.

#### Inhalation

Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

#### Ingestion

May cause stomach distress, nausea or vomiting.

### Target organs

Eyes. Skin. Respiratory system.

### Chronic effects

Prolonged or repeated exposure can cause drying, defatting and dermatitis.

### Signs and symptoms

Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

## 3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Propylene glycol monomethyl ether	107-98-2	1 - 5
Isopropanol	67-63-0	1 - 5

## 4. First Aid Measures

### First aid procedures

#### Eye contact

Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

#### Skin contact

Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

#### Inhalation

If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

#### Ingestion

Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

### Notes to physician

Symptoms may be delayed.

**General advice**

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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## 5. Fire-fighting Measures

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<b>Flammable properties</b>	Not flammable by WHMIS criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Dry chemical. Alcohol foam. Carbon dioxide.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Methods for containment</b>	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Remove sources of ignition. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material.
<b>Storage</b>	Keep out of reach of children. Do not store at temperatures above 120°F (49°C). Store in a closed container away from incompatible materials.

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## 8. Exposure Controls / Personal Protection

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**Exposure limit values****Ingredient(s)****Exposure limit values**

Isopropanol

**ACGIH-TLV**

TWA: 200 ppm

STEL: 400 ppm

Propylene glycol monomethyl ether

**ACGIH-TLV**

TWA: 100 ppm

STEL: 150 ppm

**Engineering controls**

General ventilation normally adequate.

**Personal protective equipment****Eye/Face protection**

Wear safety glasses with side shields.

**Hand protection**

Rubber gloves. Confirm with a reputable supplier first.

**Skin and body protection**

As required by employer code.

**Respiratory protection**

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Liquid
<b>Colour</b>	Blue
<b>Form</b>	Liquid
<b>Odour</b>	Not available
<b>Odour threshold</b>	Not available
<b>Physical state</b>	Liquid
<b>pH</b>	9.5 - 10.5
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Flash point</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability Limits in Air, Upper, % by Volume</b>	Not available
<b>Vapour pressure</b>	Not available
<b>Vapour density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H<sub>2</sub>O)</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Viscosity</b>	Not available
<b>Percent volatile</b>	Not available

## 10. Stability and Reactivity

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Avoid high temperatures. Do not mix with other chemicals.
<b>Incompatible materials</b>	Caustics. Acids. Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.

## 11. Toxicological Information

### Component analysis - LC50

<b>Ingredient(s)</b>	<b>LC50</b>
Isopropanol	16970 mg/l/4h rat
Propylene glycol monomethyl ether	54.6 mg/l/4h rat

### Component analysis - Oral LD50

<b>Ingredient(s)</b>	<b>LD50</b>
Isopropanol	4396 mg/kg rat
Propylene glycol monomethyl ether	3739 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	May cause irritation.
<b>Skin</b>	May cause irritation. This product may be harmful if it is absorbed through the skin.
<b>Inhalation</b>	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Sensitisation</b>	Non-hazardous by WHMIS criteria.

<b>Chronic effects</b>	Non-hazardous by WHMIS criteria.	
<b>Carcinogenicity</b>	Non-hazardous by WHMIS criteria.	
<b>ACGIH - Threshold Limit Values - Carcinogens</b>		
Isopropanol	67-63-0	A4 - Not Classifiable as a Human Carcinogen
<b>IARC - Group 3 (Not Classifiable)</b>		
Isopropanol	67-63-0	Monograph 71 [1999], Supplement 7 [1987], Monograph 15 [1977]
<b>Mutagenicity</b>	Non-hazardous by WHMIS criteria.	
<b>Reproductive effects</b>	Non-hazardous by WHMIS criteria.	
<b>Teratogenicity</b>	Non-hazardous by WHMIS criteria.	

## 12. Ecological Information

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns.	
<b>Ecotoxicity - Freshwater Algae Data</b>		
Isopropanol	67-63-0	96 Hr EC50 Scenedesmus subspicatus: >1000 mg/L; 72 Hr EC50 Scenedesmus subspicatus: >1000 mg/L
<b>Ecotoxicity - Freshwater Fish Species Data</b>		
Isopropanol	67-63-0	96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas:11130 mg/L[ static ]
Propylene glycol monomethyl ether	107-98-2	96 Hr LC50 Pimephales promelas: 20.8 g/L [static]; 96 Hr LC50 Leuciscus idus:4600-10000 mg/L[ static ]
<b>Ecotoxicity - Microtox Data</b>		
Isopropanol	67-63-0	5 min EC50 Photobacterium phosphoreum: 35390 mg/L
<b>Ecotoxicity - Water Flea Data</b>		
Isopropanol	67-63-0	48 Hr EC50 Daphnia magna: 13299 mg/L
Propylene glycol monomethyl ether	107-98-2	96 Hr EC50 water flea: 10457 mg/L
<b>Environmental effects</b>	Not available	
<b>Aquatic toxicity</b>	Not available	
<b>Persistence and degradability</b>	Not available	
<b>Bioaccumulation/accumulation</b>	Not available	
<b>Partition coefficient</b>	Not available	
<b>Mobility in environmental media</b>	Not available	
<b>Chemical fate information</b>	Not available	
<b>Other adverse effects</b>	Not available	

## 13. Disposal Considerations

<b>Waste codes</b>	Not available
<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

## 14. Transport Information

<b>Transportation of Dangerous Goods (TDG - Canada)</b>
Not regulated as dangerous goods.

## 15. Regulatory Information

<b>Canadian federal regulations</b>	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.	
<b>Canada - WHMIS - Ingredient Disclosure List</b>		
Isopropanol	67-63-0	1 %
Propylene glycol monomethyl ether	107-98-2	1 %
<b>WHMIS classification</b>	Class D - Division 2B	
<b>WHMIS status</b>	Controlled	

**Inventory Status****Country(s) or region**

Canada

Canada

**Inventory Name**

Domestic Substances List (DSL)

Non-Domestic Substances List (NDSL)

**On Inventory (Yes/No)\***

Yes

No

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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**16. Other Information**

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**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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12-April-2015

**Prepared by**

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