

SECTION 1 - IDENTIFICATION

Product identifier/Trade name: INO KLEEN 2 GLASS & CHROME ELITE CLEANER

Other means of identification:

Recommended use: Ready to use window cleaner

Restriction on use: For industrial, institutional and food plants use only.

Initial supplier identifier: NO SOLUTIONS®
C.P. 1932
Montréal, QC
1.888.ino.solu (466-7658)

Emergency phone number: (613) 996-6666 (CANUTEC)

SECTION 2 - HAZARDS IDENTIFICATION**2a GHS (Globally Harmonized System) classification**

This product is classified as:

Flammable liquid — category 3

2b Label elements

Pictogram



Signal word Warning

Hazard statements

Flammable liquid and vapour.

Precautionary statements:

Keep away from heat/ hot surfaces/sparks/open flames and other ignition sources. No smoking. Keep container tightly closed.

Wear protective gloves and eye protection

In case of fire: Use CO₂, powder or water spray to extinguish.

IF ON SKIN: Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water.

Store in a well-ventilated place. Keep cool.

Dispose of contents and container in accordance with local, provincial and federal regulations.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (weight)	GHS CLASSIFICATION
Isopropyl alcohol	67-63-0	1-5	Flammable liquid, Category 3 Eye damage/Irritation, Category 2 Specific target organ toxicity (single exposure) Category 3.
Ethylene glycol monobutyl ether	111-76-2	0.1-1	Skin Corrosion/Irritation Category 2; Eye damage/Irritation Category 2 Acute toxicity, oral Category 4.

SECTION 4 - FIRST AID MEASURES

4a Description of first aid measures**Eye contact:**

Flush or rinse eyes with water after contact. If eye irritation persists, get medical advice.

Skin contact:

Take off immediately all contaminated clothing. Rinse skin with water.

Inhalation:

Remove person to fresh air. If irritation develops, get medical advice.

Ingestion:

Wash out mouth with water. In case of ingestion, if person is conscious, give plenty of water to dilute product. Stop if person is unwell as vomiting may be dangerous. Do not induce vomiting unless told to do so by medical personnel.

4b Most important symptoms and effects

The most important known symptoms and effects are described in the labelling (section 2b) and/or in section 11.

4c Immediate medical attention and special treatment needed

No data available.

SECTION 5 - FIRE FIGHTING MEASURES

5a Extinguishing media

Suitable extinguishing media:

Water (if possible avoid powerful sprays), dry chemicals, carbon dioxide.

Unsuitable extinguishing media:

None known.

Specific hazards for product

Hazardous combustion products:

Oxides of carbon, nitrogen and other irritating gases.

Special protective equipment and precautions for firefighters

Special fire-fighting procedures/equipment:

During a fire, irritating smoke and fumes may be generated. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from irritating products produced during the combustion. Move containers from fire area if it can be done without risk. A stream of water directed into the product generates a lot of foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6a Personal precautions, protective equipment and emergency procedures

Personal protection:

Avoid contact with eyes and skin. Use adequate aeration and ventilation. Floor will be slippery in case of a spill. Use appropriate personal protection equipment (see section 8)

6b Methods and materials for containment and cleaning:

Stop the leak. For large spills, pump the product into drums or clean up spills using absorbent material. Resume cleaning by rinsing with water. Caution: floors will be slippery.

6c Environmental precautions:

Product is biodegradable. Do not let go to the sewers.

SECTION 7 - HANDLING AND STORAGE

7a Precautions for Safe handling:

Avoid contact with eyes and skin. Wear rubber gloves and eye protection. Avoid heat/ hot surfaces/sparks/open flames and other ignition sources.

7b Condition for safe storage:

Store in a sealed container in a well-ventilated place. Do not store with food products. Keep from freezing.

7c Special packaging materials: Store in its original container made of polyethylene or in other polyethylene containers.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

8a Control parameters

	Ontario Time-weighted Average Limit (TWA)	Ontario Short-Term Exposure Limit (STEL)	Notations
Isopropanol	200 ppm	400 ppm	
Ethleneglycol monobutyl ether	20 ppm		

8b Engineering controls:

Provide adequate ventilation.

8c Individual protection measures

Respiratory Protection:

Not required under normal applications.

Respirator NIOSH/MSHA approved if large spill and lack of ventilation or if formation of mists.

Skin protection and other protective equipment:

Rubber gloves recommended. Waterproof boots in case of spills.

Eye / face protection:

Eye protection.

General hygiene considerations:

KEEP OUT OF REACH OF CHILDREN. Avoid contact with eyes and skin. Never eat, drink, or smoke in work areas. Good hygiene is recommended after use of this product.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odour:	Green liquid, green apple scent
Odour threshold:	Not available
pH :	8.0-8.5
Melting point and freezing point:	Approximately 0 °C
Boiling point:	Approximately 100 -240°C
Flash point:	47° (Closed cup)
Evaporation rate (n-BuAc =1):	Not available
Lower flammable limit (% by volume):	Not available
Upper flammable limit (% by volume):	Not available.
Explosion data - Sensitivity to mechanical impact:	Not sensitive
Explosion data - Sensitivity to static discharge:	Not sensitive
Vapour pressure (mm Hg)	Approximately 20 (water)
Vapour density:	Approximately 0.6 (water)
Specific gravity or density (water = 1 at 4 °C):	1.0 g/cm ³ @ 25 °C
Solubility in water:	Miscible
Partition coefficient – n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature	Not available
Viscosity:	<10 cps @ 25 °C

SECTION 10 - STABILITY AND REACTIVITY

10a Reactivity:

Not applicable when used as directed. It is incompatible with some materials, see below.

10b Chemical stability :

Stable at room temperature, in normal handling and storage conditions. Avoid heat/ hot surfaces/sparks/open flames and other ignition sources.

10c Possibility of hazardous reactions:

May react with strong oxidizing agents.

10d Conditions to avoid:

Avoid contact with strong oxidizers.

10e Incompatible materials

Strong oxidizers.

10f Hazardous decomposition products:

With strong oxidizers: heat, water vapours, possibility of fire.

SECTION 11 - TOXICOLOGICAL INFORMATION

Primary entry route(s): Eye and ingestion.

Eye: May irritate eyes.

Skin: May cause slight skin irritation, defatting.

Inhalation: EXPOSURE TO HIGH CONCENTRATIONS to isopropyl alcohol: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

Ingestion: AFTER ABSORPTION OF LARGE QUANTITIES of isopropyl alcohol: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness.

Carcinogenicity: No ingredient listed by IARC as a possible carcinogen.

Teratogenicity, mutagenicity, other reproductive effects: No applicable information found.

Skin sensitization: Ingredients not sensitizing

Respiratory tract sensitization: Not available

Synergistic materials: Not available

Other important hazards: Not available

Toxicological data: The calculated LD₅₀ for this product is greater than 10,000 mg/Kg, oral, rat; our products are not tested on animals..

Ingredient	LD ₅₀ (route, species)	LC ₅₀ # hours (species)
Isopropyl alcohol	4710 mg/kg (oral, rat)	Not available
Ethyleneglycol monobutyl ether	615 mg/kg (oral, rat) >2,000 mg/kg (dermal, rabbit)	Not available

For more details, refer to Section 3.

SECTION 12 - ECOLOGICAL INFORMATION

12a Ecotoxicity :

TOXICITY (Fish)	Results	Exposure time	Method
Isopropyl alcohol	Pimephales promeleas 9640 mg/L	96H	Not available
Ethyleneglycol monobutyl ether	Rainbow trout 1474 mg/L	96H	Not available

TOXICITY (Daphnia)	Results	Exposure time	Method
Isopropyl alcohol	EC50 > 10000 mg/L	24H	Not available
Ethyleneglycol monobutyl ether	1,550 mg/L	48H	Not available

TOXICITY (Algae)	Results	Exposure time	Method
Isopropyl alcohol	Scenedesmus quadricuada, toxicity threshold 1800 mg/L	72H	Not available
Ethyleneglycol monobutyl ether	Pseudokirchnerella subcapitata 1,840 mg/L	72H	Not available

12b Persistence and degradability: Product is biodegradable.

12c Bioaccumulation potential:	Not available
12d Mobility in soil:	There is no test data on this product.
12e Other adverse effect	No applicable information found

SECTION 13 - DISPOSAL CONSIDERATIONS

Eliminate according to federal, provincial and local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Transportation of Dangerous Goods:

Exempted as an aqueous solution of alcohol.

UN number
 Proper shipping name:
 Class:
 Packing group:
 Special case:

SECTION 15 - REGULATORY INFORMATION

In Canada

WHMIS information:

Product is regulated according to the Hazardous Products Regulations (HPR) in Canada. This product has been classified in accordance with the hazard criteria of the HPR and this MSDS contains all the information required by the HPR.

WHMIS Classification: See section 2a.

CEPA information: Ingredients are listed on the DSL inventory.

SECTION 16 - OTHER INFORMATION

Date of latest revision 2019-08-20

References:

1. Manufacturer'/suppliers' MSDS.
2. Occupational Exposure Limits for Ontario Workplaces required under Regulation 833
3. International Agency for Research on Cancer Monographs
4. The European Chemicals Agency (ECHA) website.

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act

cps	Centipoises
DSL	Domestic Substance List
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal concentration
LD	Lethal Dosage
N/Av	Not available
N/Ap	Not Applicable
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value
WHMIS	Workplace Hazardous Materials Information System

End of the MSDS