

## SECTION 1 - IDENTIFICATION

**Product identifier/Trade name** INO KLEEN 3 GLASS & WINDOW CLEANER

**Other means of identification:**

**Recommended use:** Glass cleaner, ready to use

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

**Initial supplier identifier:** INO 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 and an eye irritant category 2

### 2b Label elements

**Pictogram**



**Signal word** Warning

**Hazard statements**

Flammable liquid and vapour  
Causes serious eye irritation

**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. Wash hands thoroughly after handling.

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.

**IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water.**  
**In case of fire: Use CO2, powder or water spray to extinguish.**  
**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.
2-butoxyethanol	111-76-2	1-2	Acute toxicity, oral, dermal, by inhalation, Category 4 Skin Corrosion/Irritation Category 2; Eye damage/Irritation Category 2

**SECTION 4 - FIRST AID MEASURES**

**4a Description of first aid measures**

**Eye contact:**

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.

**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
Isopropyl alcohol	200 ppm	400 ppm	
2-butoxyethanol	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

<b>Appearance and odour:</b>	Blue liquid, mint and alcohol odour.
<b>Odour threshold:</b>	Not available
<b>pH :</b>	10.5-11.5
<b>Melting point and freezing point:</b>	Approximately 0 °C
<b>Boiling point:</b>	Approximately 100 °C
<b>Flash point:</b>	45° (Closed cup)
<b>Evaporation rate (n-BuAc =1):</b>	Not available
<b>Lower flammable limit (% by volume):</b>	Not available
<b>Upper flammable limit (% by volume):</b>	Not available.
<b>Explosion data - Sensitivity to mechanical impact:</b>	Not sensitive
<b>Explosion data - Sensitivity to static discharge:</b>	Not sensitive
<b>Vapour pressure (mm Hg)</b>	Approximately 20 (water)
<b>Vapour density:</b>	Approximately 0.6 (water)
<b>Specific gravity or density (water = 1 at 4 °C):</b>	0.99 g/cm <sup>3</sup> @ 25 °C
<b>Solubility in water:</b>	Miscible
<b>Partition coefficient – n-octanol/water:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Viscosity:</b>	<100 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 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. 2-butoxyethanol may be absorbed through the skin.  
**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. In long-term animal studies with ethylene glycol butyl ether, small but statistically significant increases in tumors were observed in mice but not rats. The effects are not believed to be relevant to humans. If the material is handled in accordance with proper industrial handling procedures, exposures should not pose a carcinogenic risk to man.

**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 LD<sub>50</sub> for this product is greater than 10,000 mg/Kg, oral, rat; our products are not tested on animals..

Ingredient	LD <sub>50</sub> (route, species)	LC <sub>50</sub> # hours (species)
Isopropyl alcohol	4710 mg/kg (oral, rat)	Not available
2-butoxyethanol	615 mg/kg (oral, rat)	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
2-butoxyethanol	Rainbow trout 1474 mg/L	96H	Not available

TOXICITY (Daphnia)	Results	Exposure time	Method
Isopropyl alcohol	EC50 > 10000 mg/L	24H	Not available
2-butoxyethanol	EC50 1550 mg/L	48H	Not available

TOXICITY (Algae)	Results	Exposure time	Method
------------------	---------	---------------	--------

Isopropyl alcohol	Scenedesmus quadricuada, toxicity threshold 1800 mg/L	72H	Not available
2-butoxyethanol	Pseudokirchnerella subcapitata 1840 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** 2019-07-29

**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