

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** RA001C  
**Product name** Pro-Link Glass Cleaner  
**Effective date** 11-Oct-2010  
**Company information** Pro-Link Inc  
Ottawa Ontario, K1Z 1E9 Canada  
**Company phone** General Assistance 1-800-74-LINKS  
**Emergency telephone US** 800-424-9300  
**Emergency telephone outside US** 703-527-3887  
**Version #** 22  
**Supersedes date** 03-Sep-2010  
**Expiry Date** 31-Jul-2013

## 2. Hazards Identification

**Emergency overview** Aerosol. CONTENTS UNDER PRESSURE.  
Prolonged exposure may cause chronic effects.

**Potential health effects**

**Routes of exposure** Inhalation. Eye contact. Skin contact. Ingestion.

**Eyes** Contact with eyes may cause irritation.

**Skin** May be harmful if absorbed through skin.

**Inhalation** Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

**Ingestion** Exposure by ingestion of an aerosol is unlikely. Components of the product may be absorbed into the body by ingestion.

**Target organs** 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans.

Skin.

**Chronic effects** May be harmful if absorbed through skin.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethyl Alcohol	64-17-5	1 - 5
2-Butoxyethanol	111-76-2	1 - 5
Propane	74-98-6	1 - 5
n-Butane	106-97-8	1 - 5
Methanol	67-56-1	0.1 - 1
Non-hazardous and other components below reportable levels		60 - 100

## 4. First Aid Measures

### First aid procedures

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Get medical attention immediately.

**Skin contact** Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

**Inhalation** Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if symptoms persist.

**Ingestion** Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, call a poison control center immediately.

## 5. Fire Fighting Measures

**Flammable properties** Ruptured cylinders may rocket.

**Extinguishing media**

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Protection of firefighters**

**Protective equipment and precautions for firefighters** Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. Do not direct water at source of leak or safety devices; icing may occur. Cool containers with flooding quantities of water until well after fire is out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

**Unusual fire & explosion hazards** Ruptured cylinders may rocket.

## 6. Accidental Release Measures

**Methods for containment** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). If possible, turn leaking containers so that gas escapes rather than liquid. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

**Methods for cleaning up** Clean up in accordance with all applicable regulations. Should not be released into the environment. Ventilate the contaminated area.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

## 7. Handling and Storage

**Handling** Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. When using do not smoke. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not use if spray button is missing or defective. Use only with adequate ventilation. Do not re-use empty containers. Do not get this material in contact with skin.

**Storage** Contents under pressure. Do not puncture, incinerate or crush. Keep away from heat and sources of ignition. Avoid exposure to long periods of sunlight. Keep at temperature not exceeding 49 °C. Keep in an area equipped with sprinklers. Level 1 Aerosol (NFPA 30B)

## 8. Exposure Controls / Personal Protection

### Exposure limits

ACGIH Components	CAS #	TWA	STEL	Ceiling
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	Not established
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Methanol	67-56-1	200 ppm	250 ppm	Not established

### Personal protective equipment

**Skin protection** Wear appropriate chemical resistant clothing. Protective gloves. Wear chemical protective equipment that is specifically recommended by the manufacturer.

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

<b>9. Physical &amp; Chemical Properties</b>
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<b>Appearance</b>	Compressed liquefied gas.
<b>Boiling point</b>	204.8 °F (96.1 °C) estimated
<b>Color</b>	Colorless.
<b>Evaporation rate</b>	Not available
<b>Flammability (HOC)</b>	3.2733 kJ/g estimated
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Flash back</b>	No
<b>Flash point</b>	-156 °F (-104.4 °C) Propellant
<b>Form</b>	Compressed gas. Aerosol.
<b>Freezing point</b>	Not available
<b>Odor</b>	Butyl
<b>Odor threshold</b>	Not available
<b>pH</b>	9.5 - 10.5
<b>Physical state</b>	Liquid.
<b>Pressure</b>	70 - 90 psig @ 70F
<b>Solubility (H2O)</b>	Not miscible.
<b>Specific gravity</b>	0.9605 estimated

<b>10. Chemical Stability &amp; Reactivity Information</b>
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<b>Chemical stability</b>	Risk of ignition.
<b>Conditions to avoid</b>	Aerosol containers are unstable at temperatures above 49°C.
<b>Incompatible materials</b>	None known.
<b>Hazardous decomposition products</b>	Irritants. Toxic gas.

<b>11. Toxicological Information</b>
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<b>Acute effects</b>	Acute LD50: 7571 mg/kg estimated, Rat, Dermal
<b>Component analysis - LD50</b>	
<b>Toxicology Data - Selected LD50s and LC50s</b>	
2-Butoxyethanol	111-76-2      Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat 470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg
Ethyl Alcohol	64-17-5      Oral LD50 Rat 7060 mg/kg
Methanol	67-56-1      Inhalation LC50 Rat 83.2 mg/L 4 h; Inhalation LC50 Rat 64000 ppm 4 h; Oral LD50 Rat 5628 mg/kg; Dermal LD50 Rabbit 15800 mg/kg
n-Butane	106-97-8      Inhalation LC50 Rat 658 mg/L 4 h
Propane	74-98-6      Inhalation LC50 Rat 658 mg/L 4 h
<b>Sensitization</b>	Not expected to be hazardous by WHMIS criteria.
<b>Carcinogenicity</b>	Not expected to be hazardous by WHMIS criteria. Cancer hazard. Risk of cancer cannot be excluded with prolonged exposure.
<b>ACGIH - Threshold Limit Values - Carcinogens</b>	
2-Butoxyethanol	111-76-2      A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Ethyl Alcohol	64-17-5      A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
<b>IARC - Group 1 (Carcinogenic to Humans)</b>	
Ethyl Alcohol	64-17-5      Monograph 96 [in preparation] (in alcoholic beverages)
<b>Mutagenicity</b>	Not expected to be hazardous by WHMIS criteria.
<b>Reproductive effects</b>	Not expected to be hazardous by WHMIS criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by WHMIS criteria.

**Chronic toxicity**

May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

**12. Ecological Information****Ecotoxicity**

Components of this product have been identified as having potential environmental concerns.

LC50 36327 mg/L, Fish, 96.00 Hours,  
EC50 26428 mg/L, Daphnia, 48.00 Hours,  
IC50 11902 mg/L, Algae, 72.00 Hours,**Environmental effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**13. Disposal Considerations****Disposal instructions**

Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

**14. Transport Information****Canadian Transportation of Dangerous Goods (TDG) Requirements**

<b>Proper shipping name</b>	AEROSOLS, flammable
<b>Hazard class</b>	2.1
<b>UN number</b>	UN1950
<b>Marine pollutant</b>	•
<b>Special provisions</b>	80 SOR/2002-306
<b>Packaging exceptions</b>	If <1L: Consumer Commodity

**15. Regulatory Information****Canadian regulations**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**Canada - WHMIS - Ingredient Disclosure List**

2-Butoxyethanol	111-76-2	1 %
Ethyl Alcohol	64-17-5	0.1 %
Methanol	67-56-1	1 %
n-Butane	106-97-8	1 %

**WHMIS status**

Controlled

**WHMIS classification**A - Compressed Gas  
D2A - Other Toxic Effects-VERY TOXIC  
D2B - Other Toxic Effects-TOXIC**WHMIS labeling**

**Inventory status**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

**16. Other Information****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.

**MSDS sections updated**

Product and Company Identification: Product and Company Identification

**Prepared by**

Regulatory Compliance