

**MATERIAL SAFETY DATA SHEET****SECTION 1 — PRODUCT IDENTIFICATION**

Product Name: Pro Series Green Glass Cleaner Concentrate
WHMIS Classification: D2B: Material causing other toxic effects
Product use: Glass cleaner
Product Code Number: 40550, 40551, 40552, 40580
MSDS Number: 0475

Supplier name and address:
 Armstrong Manufacturing Inc.
 2485 Haines Road
 Mississauga, Ontario L4Y 1Y7
 (905) 566-1395

Manufacturer's name and address:
 Refer to Supplier

Emergency Telephone #: CANUTEC (613) 996-6666

SECTION 2 — CHEMICAL COMPOSITION/HAZARDOUS INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>LD₅₀ mg/kg oral/rat</u>	<u>LD₅₀ mg/kg skin/rabbit</u>	<u>LC₅₀ ppm inh/rat</u>
D-Glucopyranoside, C8-C16 alkyl	110615-47-9, 68515-73-1	1-5	>5000 mg/kg	n/av	n/av

SECTION 3 — HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Routes of entry: Inhalation, ingestion, skin and eye contact.

Signs and symptoms of short-term (acute) exposure:

Inhalation: Inhalation of spray or mist may cause irritation of the respiratory tract.

Skin contact: Prolonged, repeated contact may mild cause irritation.

Eye contact: Can cause mild eye irritation.

Ingestion: May cause irritation of the gastrointestinal system and vomiting.

Effects of long-term (chronic) exposure: n/av

Other important hazards: n/ap

SECTION 4 — FIRST AID MEASURES

Inhalation: Remove victim to fresh air. If symptoms persist, call a physician.

Skin contact: Remove contaminated clothing. Flush area with plenty of water. If irritation persists, seek medical attention.

Eye contact: IMMEDIATELY flush eyes with water for at least 15 minutes, holding the eyelids open. Contact a physician immediately.

Ingestion: DO NOT induce vomiting. If victim is completely conscious/alert, rinse mouth with water and give one glass of water. Seek immediate medical attention.

SECTION 5 — FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability: Product is water based and non-flammable.

Flash point (Method): n/av (>93, PMCC)

Lower flammable limit (% by volume): n/av

Upper flammable limit (% by volume): n/av

Explosion data: *Sensitivity to mechanical impact:* n/ap *Sensitivity to static discharge:* n/ap
Oxidizing properties: Not an oxidizer **Auto-ignition temperature:** n/ap
Suitable extinguishing media: Water spray, foam, dry chemical, or carbon dioxide
Special fire-fighting procedures/equipment: Fire-fighters should wear a positive pressure self-contained breathing apparatus, approved by NIOSH/MSHA.
Hazardous combustion products: Oxides of carbon & nitrogen, and hydrogen chloride.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal precautions: Not normally required, unless release is such that a mist is created, then wear an appropriate NIOSH mask for mists.
Environmental precautions: General ventilation.
Spill response/Cleanup: Before attempting clean-up, review hazard data in this MSDS. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered and labelled containers.
Prohibited materials: n/ap

SECTION 7 — HANDLING AND STORAGE

Safe handling procedures: Maintain adequate ventilation. Wear recommended personal protection. Wash hands thoroughly after handling.
Storage requirements: Store in a cool, dry place with lid on.
Special packaging materials: n/av

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering controls: General ventilation
Respiratory protection: If conditions are such that a mist is created wear a NIOSH/MSHA approved mask for mists.
Protective gloves: Protective gloves such as natural rubber, neoprene, latex, or butyl rubber should be worn to prevent skin contact.
Eye protection: safety glasses
Other protective equipment: Make sure an eyewash station and safety shower is available.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical form, colour and odour: Clear blue liquid	pH (as supplied): 9.8-10.7
Odour threshold: Odourless	Melting/freezing point: 0 °C
Boiling point: 100°C	Solubility in water: Soluble
Vapour pressure: n/av	Vapour density: n/av
Coefficient of oil/water distribution: n/av	Evaporation rate: n/av
Specific gravity or relative density (water = 1): 1.005	Percent Volatile by Weight: 98% (w/w)
Volatile organic compounds (VOC's): n/av	

SECTION 10 — REACTIVITY AND STABILITY DATA

Stability and reactivity: Product is stable
Conditions to avoid: Contact with strong oxidizers
Materials to avoid: Avoid contact with strong oxidizers.
Hazardous decomposition products: Thermal decomposition can produce oxides of carbon and nitrogen, and hydrogen chloride.

SECTION 11 — TOXICOLOGICAL INFORMATION

LD₅₀: See Section 2. **LC₅₀:** See Section 2.
Exposure limits: ACGIH-TLV; ACGIH-STEL; ACGIH-CEILING n/av
Carcinogenicity: No ingredient listed by IARC, ACGIH, NTP, or OSHA as carcinogens.
Teratogenicity, mutagenicity, other reproductive effects: n/av
Sensitization to material: n/av

Conditions aggravated by exposure: n/av

Synergistic materials: n/av

SECTION 12 — ECOLOGICAL INFORMATION
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Environmental effects: n/av

SECTION 13 — WASTE DISPOSAL

Handling for disposal: Reuse if possible. Do not discharge waste material into the environment.

Methods of disposal: Follow local, provincial or state, and federal regulations.

SECTION 14 — TRANSPORTATION INFORMATION
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Shipping description: Not regulated

Please note: This shipping description is of a general nature only. It does not consider package sizes, modes of transport and other specific circumstances. Appropriate regulations should be referenced, and handling for transportation of dangerous goods/hazardous materials should be performed by trained personnel only.

SECTION 15 — REGULATORY INFORMATION
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WHMIS information: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

SECTION 16 — OTHER INFORMATION

Prepared by: Armstrong Manufacturing Inc.

Telephone number: (905) 566-1395

Preparation date: October 26, 2015

References:

1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2003.
2. International Agency for Research on Cancer Monographs, Supplement 7, 1988.
3. Canadian Centre for Occupational Health and Safety. CHEMINFO database.
4. Material Safety Data Sheets from raw materials suppliers.

n/ap Not applicable

n/av Not available

MT/js