

SECTION 1 IDENTIFICATION

Product name: APRIL CALPRO

Product code: 18.9-CALPRO-SF, 205-CALPRO-SF, 900-CALPRO-SF

Intended use: heat transfer fluid

Manufacturer: Verco International Inc., 9, rue Béland, L'Isle-Verte QC Canada G0L 1K0

Emergency telephone numbers: Verco International: 1 800 393-3921; CANUTEC: (613) 996-6666

SECTION 2 HAZARDS IDENTIFICATION

GHS classification: Eye irritation - Category 2B:

Signal Word: Warning

Hazard Statements: Causes eye irritation.

PREVENTION: Wash hands and skin thoroughly after handling.

INTERVENTION: 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/attention.

Storage: Store in a well ventilated place. Keep cool. Keep containers tightly closed. Store locked up.

Disposal: Dispose of contents/containers following government regulations.

Aggravated medical conditions: None known.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

Chemical name	CAS #	Concentration
1,2-propylene glycol	57-55-6	30-36 %

SECTION 4 FIRST AID MEASURES

INHALATION: Remove source of exposure or move to fresh air. Call a Poison Control Centre or doctor if unwell.

SKIN CONTACT: Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts) and clean them. Wash skin thoroughly with warm flowing water and mild soap for 5 minutes. Call a Poison Control Centre or doctor if unwell.

EYE CONTACT: Immediately rinse the contaminated eye(s) with lukewarm gently flowing water for 15-20 minutes while holding the eyelid(s) open. Remove contact lenses if present and easy to do. If eye irritation persists, get medical advice or attention.

INGESTION: Rinse mouth with water. Call a Poison Control Centre or doctor if unwell.

Most important symptoms and effects, acute and delayed: Treat symptomatically. Call a Poison Control Centre or doctor immediately if large quantities have been ingested or inhaled.

Medical conditions aggravated by exposure: Dermatitis.

Indications for immediate medical attention: Persistent symptoms.

SECTION 5 FIRE FIGHTING MEASURES

Fire extinguishing agents: Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

Unsafe fire extinguishing agents: None

Special hazards: Can ignite if strongly heated. Closed containers may rupture violently when heated releasing contents. Not sensitive to static discharge. In a fire, carbon monoxide and carbon dioxide may be generated.

Advice to fire fighters: See Section 6 for information on responding to leaks/spills and Section 8 for advice on suitable protective materials.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and material for containment and cleaning up: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers and water courses. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal following government regulations. Use spark-proof tools. Use a licensed contractor to dispose of waste. Wear protective clothing.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof equipment and non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse containers.

Storage requirements: Store in accordance with local regulations. Store in a segregated and approved area. Store in original containers protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10), food and drink. Eliminate all sources of ignition. Keep away from oxidizing materials. Keep containers tightly closed until ready for use. Containers that have been opened must be carefully closed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 EXPOSURE CONTROL / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS #	ACGIH TLV		OSHA PEL		AIHA WEEL	
		TWA	STEL	TWA	ceiling	8-hr TWA	TWA
1,2-propylene glycol	57-55-6	unknown	unknown	unknown	unknown	10 mg/m ³	unknown

Appropriate engineering controls: General ventilation is usually adequate. For large scale use of this product, provide eyewash in work area if contact or splash hazard exists.

Protective and hygienic measures: Use the standard precautionary measures for handling chemicals. Keep away from food and beverages. Wash hands before breaks and at the end of the day.

Respiratory protection: Not necessary if room is well-ventilated.

Skin protection: Not required, if used as directed.

Eye protection: Wear safety glasses.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Property	Method	Value		
		Concentrated	50/50	30/70
color	visual	clear	clear	clear
specific gravity @ 15.6 °C	ASTM D1122	1.045	1.020	1.015
propylene glycol content (%)	ASTM D1123	96	48	29
pH	ASTM D1287	9.5	9.3	9.2
boiling point (°C)	ASTM D1120	145	105	103
freezing point (°C)	ASTM D1177	-60	-33	-16

SECTION 10 STABILITY AND REACTIVITY

Reactivity: None known.

Hazardous reactions: Increased risk of fire and explosion on contact with strong oxidizing agents.

Conditions to avoid: Temperatures above 99.0 °C.

Incompatible materials: No further relevant information available.

Hazardous products of decomposition: None known.

SECTION 11 TOXICOLOGICAL INFORMATION

Likely routes of exposure: Inhalation, eye contact, ingestion.

Chemical name	LC50	LD50 (oral)	LD50 (dermal)
1,2-propylene glycol	not available	14,800 mg/kg (rabbit)	20,800 mg/kg (rabbit)

Skin irritation: Human experience and animal tests show mild irritation.

Eye irritation: May cause mild eye irritation. Symptoms include sore, red eyes and tearing.

Respiratory or skin sensitization: Not known to be a respiratory or skin sensitizer.

STOT - single exposure: Not harmful based on information for closely related materials.

Carcinogenicity

Chemical name	IARC	ACGIH	NTP	OSHA
1,2-propylene glycol	not listed	not listed	not listed	not listed

Reproductive toxicity/Germ cell mutagenicity: No effect.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity/persistence and degradability/bioaccumulative potential/mobility in soil: No further relevant information available.

Additional information: Do not allow product to reach ground water, water course or sewage system.

SECTION 13 DISPOSAL CONSIDERATIONS

Follow government regulations when disposing of empty containers.

SECTION 14 TRANSPORTATION INFORMATION

International regulations:

- IATA-DGR and IMDG Code: Does not apply to this product.
- Annex II of MARPOL 73/78 and the IBC Code: Does not apply to this product.

National regulations: Does not apply to this product.

SECTION 15 REGULATORY INFORMATION

The components of this product are reported in the following inventories: DSL, NDSL, TSCA

SECTION 16 OTHER INFORMATION

The information contained in this document is based on our present knowledge. This document does not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

ACRONYMS

ACGIH (American Conference of Governmental Industrial Hygienists), **AIHA** (American Industrial Hygiene Association), **CAS** (Chemical Abstracts Service), **DSL** (Domestic Substance List), **GHS** (Global Harmonization System), **IARC** (International Agency for Research on Cancer), **IATA-DGR** (International Air Transport Association Dangerous Goods Regulations), **IBC Code** (International Bulk Container Code), **IMDG Code** (International Maritime Dangerous Goods Code), **LC50** (Lethal Concentration that kills 50% of the population), **LD50** (Lethal Dose that kills 50% of the population), **NDSL** (Non-Domestic Substance List), **NTP** (National Toxicology Program), **OSHA** (Occupational Safety and Health Administration), **PEL** (Permissible Exposure Limit), **STEL** (Short Term Exposure Limit), **STEV** (Short Term Exposure Value), **STOT** (Specific Target Organ Toxicity), **TDG** (Transportation of Dangerous Goods), **TLV** (Threshold Limit Value), **TSCA** (Toxic Substances Control Act), **TWA** (Time Weighted Average), **WEEL** (Workplace Environmental Exposure Level), **WHMIS** (Workplace Hazardous Materials Information System)