

COOLANT -45 C

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Material Name	Coolant -45 C
Other names/Synonyms	
Recommended Use	Coolant, antifreeze
Restrictions on Use	Applications with direct or indirect food or potable water contact. Any application where the product is to be purposely used as a non-reactant component where the potential for sufficient human contact and/or ingestion exists. De-icing of roads or sidewalks. Consumer or hospital usage.
Supplier	Vanchem Performance Chemicals, 4387 Corporate Drive, Burlington, Ontario L7L 5T9
Emergency Phone Number	CANUTEC (613) 996-6666

2. HAZARDS IDENTIFICATION

GHS Classification	Acute toxicity, Category 4 (oral) Specific target organ toxicity – repeated exposure, Category 2, Kidney.
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GHS Label Elements



Signal Word:	Warning
Hazard Statement(s):	Not classified as a physical hazard under GHS criteria. H302 Harmful if swallowed H373 May cause damage to organs or organ systems through prolonged or repeated exposure. Kidney.
Precautionary Statement(s) Prevention:	P260 Do not breathe fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling.

Response: P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 If swallowed, rinse mouth.
P314 Get medical advice/attention if you feel unwell.

Storage: No precautionary phrases.

Disposal: P501 Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

Other Hazards: Not classified as flammable but will burn.
Ingestion may cause drowsiness and dizziness.
Inhalation of vapours or mists may cause irritation to the respiratory system.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%
Ethylene Glycol	107-21-1	40-70

4. FIRST AID MEASURES

First Aid Measures

Inhalation Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

Skin Contact Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

Eye Contact Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion DO NOT DELAY. Do not induce vomiting. If victim is alert, rinse mouth and drink ½ to 1 glass of water to help dilute the material. Do not give liquids to a drowsy, convulsing, or unconscious person. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Most Important symptoms and effects, both acute and delayed

Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

Immediate medical attention and special treatment

IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!

May cause significant acidosis. Call a doctor or poison control center for guidance.

5. FIRE-FIGHTING MEASURES

Specific Hazards

Material will not burn unless preheated. Carbon monoxide may be evolved if incomplete combustion occurs. Containers exposed to intense heat from fires should be cooled with large quantities of water.

Suitable Extinguishing Media

Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media

Do not use water in a jet.

Special Protective Equipment and Precautions for Fire-fighters

Wear full protective clothing and self-contained breathing apparatus. Evacuate the area of all non-essential personnel. Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see section 8 of this Safety Data Sheet.

Environmental Precautions

Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. Use appropriate containment to avoid environmental contamination. Ventilate contaminated area thoroughly.

Methods and Materials for Containment and Cleaning Up

Concentrated product: Contain run-off from residue flush and dispose of properly. Soak up residue with an absorbent such as clay, sand or other suitable material.

Small spills or leaks: transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Soak up any residues with an appropriate absorbent material and dispose of safely.

Large spills or leaks: transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Soak up residue with absorbent material and dispose of safely.

Other information

See section 13 for information on disposal. Observe all relevant local regulations. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Dike and contain spill water.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing vapours or contact with eyes, skin and clothing. Only use in well ventilated areas. Do not empty into drains. Wash thoroughly after handling and before eating, drinking or smoking. For personal protective equipment guidance see Section 8 of this Safety Data Sheet.

Conditions for safe storage

Keep container tightly closed. Store in original unopened container in a cool, well ventilated area.

Product Transfer

Keep containers closed when not in use. Do not pressurize drum containers to empty.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH ®	TLV ®	OSHA	PEL	AIHA	WEEL™
Chemical Name	Ceiling Aerosol	STEL	TWA	Ceiling	8-hr TWA	Short-term TWA (C)
Ethylene Glycol	100 mg/m ³	127 mg/m ³	Not available	Not available	Not available	Not available

Consult local authorities for provincial or state exposure limits.

ACGIH®=American Conference of Governmental Industrial Hygienists. TLV®=Threshold Limit Value. TWA=Time-Weighted Average. STEL = Short-term Exposure Limit. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. AIHA ® = AIHA ® Guideline Foundation. WEEL™ = Workplace Environmental Exposure Limit.

Appropriate Engineering Controls

No exposure controls are ordinarily required under normal conditions of use. It is good general industrial hygiene practice to minimize exposure to the material. Wash hands before eating, drinking, smoking and using the toilet. Launder contaminated clothing before re-use.

Individual Protection Measures

Eye/Face Protection

Chemical Face Goggles

Skin Protection

Chemical resistant gloves/gauntlets, boots, and apron. Standard issue work clothes.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Where air-filtering respirators are unsuitable, use appropriate positive pressure breathing apparatus. Select a filter suitable for combined particulate/organic gases and vapours (Type A/Type P boiling point >65C (149 F) meeting EN14387 and EN143. :

9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear, colourless
Odour	Mild
Odour Threshold	Data not available
pH	6.0-8.0
Melting Point/Freezing Point	Melting Point not available/<-45C
Initial Boiling Point/Range	Not available
Flash Point	116.1 C, (TCC)
Evaporation Rate	Not available
Flammability (solid, gas)	Not available.
Upper/Lower Flammability or Explosive Limit	Flammable at temperatures >100 C.
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Specific Gravity	1.065-1.075
Solubility in water	Completely
Partition Coefficient	Not available
n-Octanol/ Water (Log Kow)	
Auto-ignition Temperature	Not available
Viscosity	Not available
Other information	Not available
Physical State	Liquid

10. STABILITY AND REACTIVITY

Reactivity

Reacts with strong oxidizing agents

Chemical Stability

Stable under normal conditions of use.

Conditions to Avoid

High Temperature

Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

Possibility of Hazardous Reactions

Data not available.

Hazardous Decomposition Products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin and eye contact are the primary routes of exposure although exposure may occur through Inhalation or following ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Ethylene Glycol	Not available	<300 - <=2000 mg/kg	>5000 mg/kg

Skin Corrosion/Irritation

Expected to be of low toxicity. Slightly irritating to skin.

Serious Eye Damage/Irritation

Slightly irritating to the eye.

STOT (Specific Target Organ Toxicity) – Single Exposure

Ingestion may cause drowsiness and dizziness.

Inhalation

Inhalation of vapours or mists may cause irritation to the respiratory system.

Aspiration Hazard

Not considered an aspiration hazard.

STOT (Specific Target Organ Toxicity) – Repeated Exposure**Respiratory and/or Skin Sensitization**

May cause damage to organs or organ systems through prolonged or repeated exposure.

Kidney: can cause kidney damage.

Carcinogenicity

Not carcinogenic in animal studies.

Reproductive and Developmental Toxicity

Does not impair fertility. Not a developmental toxicant. Causes foetotoxicity in animals; considered to be secondary to maternal toxicity.

Germ Cell Mutagenicity

No evidence of mutagenic activity.

12. ECOLOGICAL INFORMATION

This section is not required by WHMIS.

This section is not required by OSHA.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. For unused and uncontaminated product, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations.

Container Disposal

Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor.

Local Legislation

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFORMATION

Not regulated under Canadian TDG Regulations.

DOT Non-Bulk: Not regulated under US DOT Regulations.

IMDG not regulated.

OCAO/IATA: Not regulated. This material is not classified as dangerous under IATA regulations. or

Country specific requirements should be followed.

Special Precautions Not applicable

For User

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS Classification Class D, Division 2, Subdivision A

Class D, Division 2, Subdivision B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8 (b)

All ingredients are listed on the TSCA inventory.

16. OTHER INFORMATION

SDS Prepared By	Health & Safety Department
Phone No.	905-336-1445
Date of Preparation	November 26, 2014
SDS Version Number	1.0

To the best of our knowledge, the information contained herein is accurate. VANCHEM cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user.

Users of any chemical should satisfy themselves that the material can be used safely. Although certain hazards may be described herein we cannot guarantee that these may be the only hazards that exist.