

## R.V. Plumbing Antifreeze

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	R.V. Plumbing Antifreeze
<b>Other Means of Identification</b>	15-334, 15-335, 15-385QC, 25-339, 25-339-1000, 35-334AT, 35-334C, 35-334RVPRO, 35-334SCP, 35-334WM, 35-335WM, 35-339AT, 35-384CLU, 35-384H, 35-384RBF, 35-384TREV, 35-385H, 35-394H, 85-334, 85-339
<b>Recommended Use</b>	Please refer to Product label.
<b>Restrictions on Use</b>	None known.
<b>Manufacturer / Supplier</b>	Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory Department, 905-878-5544, www.recochem.com
<b>Emergency Phone No.</b>	CANUTEC, 613-996-6666, 24 Hours
<b>SDS No.</b>	1600

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Flammable liquid - Category 3; Skin corrosion/irritation - Category 2; Serious eye damage/eye irritation - Category 2A

#### GHS Label Elements



Signal Word:  
Warning

#### Hazard Statement(s):

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

#### Precautionary Statement(s):

##### Prevention:

P210	Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
P210	Keep away from sparks and open flames.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating, lighting, and other equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash hands and skin thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.

Response:

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P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P370 + P378 In case of fire: Use appropriate foam, carbon dioxide, dry chemical powder, water spray or fog to extinguish.

**Storage:**

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**Other Hazards**

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Ethanol	64-17-5	15-40	
1,2-Propylene glycol	57-55-6	1-5	

**Notes**

The specific chemical identity and/or exact percentage of composition (concentration) has been withheld as a trade secret.

### SECTION 4. FIRST-AID MEASURES

**First-aid Measures**

**Inhalation**

Remove source of exposure or move to fresh air. Get medical advice/attention if you feel unwell or are concerned.

**Skin Contact**

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice/attention if you feel unwell or are concerned. If skin irritation occurs get medical advice/attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

**Most Important Symptoms and Effects, Acute and Delayed**

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Immediate Medical Attention and Special Treatment**

**Target Organs**

Liver, eyes, nervous system, skin.

**Special Instructions**

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Medical Conditions Aggravated by Exposure**

Dermatitis.

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## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

#### Unsuitable Extinguishing Media

None known.

### Specific Hazards Arising from the Chemical

Flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. Can be ignited by static discharge. See Section 9 (Physical and Chemical Properties) for flash point and explosive limits. See Section 9 (Physical and Chemical Properties) for explosive limits. Causes fire through friction. In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

### Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

### Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 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. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use 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 container.

### Conditions for Safe Storage

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

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Ethanol	1000 ppm	1000 ppm	1000 ppm			
1,2-Propylene glycol	Not established	Not established	Not established	Not established		

### Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Use only non-combustible, compatible materials for walls, floors, ventilation system, air cleaning devices, pallets, shelving. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Not required but it is good practice to wear safety glasses or chemical safety goggles.

#### Skin Protection

Not required, if used as directed.

Nitrile rubber.

#### Respiratory Protection

Not normally required if product is used as directed.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Clear pink liquid.
<b>Odour</b>	Citrus
<b>Odour Threshold</b>	100 ppm (Ethanol)
<b>pH</b>	7.5 - 8.5 (100% solution)
<b>Melting Point/Freezing Point</b>	-114 °C (-173 °F) (estimated) (Ethanol) (melting); -114 °C (-173 °F) (estimated) (Ethanol) (freezing)
<b>Initial Boiling Point/Range</b>	78 °C (172 °F) (estimated) (Ethanol)
<b>Flash Point</b>	35 °C (95 °F) (closed cup)
<b>Evaporation Rate</b>	2.4 (estimated) (n-butyl acetate = 1)
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper/Lower Flammability or Explosive Limit</b>	19% (Ethanol) (upper); 3.3% (Ethanol) (lower)
<b>Vapour Pressure</b>	42.8 mm Hg (5.7 kPa) at 20 °C (Ethanol)
<b>Vapour Density (air = 1)</b>	1.59
<b>Relative Density (water = 1)</b>	0.96 - 0.98 at 20 °C
<b>Solubility</b>	Soluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	363 °C (685 °F) (Ethanol)
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); 1.17 - 1.21 centipoises at 20 °C (estimated) (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid

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Molecular Weight

Not applicable

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

None known.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None known.

### Conditions to Avoid

None known.

### Incompatible Materials

Slightly reactive or incompatible with the following materials: oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), metals (e.g. aluminum).

Not corrosive to metals.

### Hazardous Decomposition Products

None known.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Ethanol	21000 mg/m <sup>3</sup> (mouse) (4-hour exposure)	3450 mg/kg (mouse)	> 15800 mg/kg (rabbit)
1,2-Propylene glycol	Not available	14800 mg/kg (rabbit)	20800 mg/kg (rabbit)

LC50: Not applicable.

LD50 (oral): Not applicable.

LD50 (dermal): Not applicable.

### Skin Corrosion/Irritation

Human experience and animal tests show mild irritation.

### Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation. (Ethanol)

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

May be harmful based on human experience and animal tests. Nose and throat irritation. (Ethanol)

#### Skin Absorption

Not harmful based on human experience and animal tests. (Ethanol)

#### Ingestion

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May be harmful based on information for closely related materials.

#### Aspiration Hazard

Not known to be an aspiration hazard.

#### STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause Following skin contact: dermatitis. Symptoms may include dry, red, cracked skin (dermatitis).

#### Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer.

Human experience shows an allergic skin reaction (skin sensitization) in rare cases following exposure at work.  
(Ethanol)

#### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Ethanol	Group 1	A3	Not Listed	Not Listed
1,2-Propylene glycol	Not Listed	Not designated	Not Listed	Not Listed

Carcinogenicity classification is based on alcoholic beverage consumption and not relevant to occupational exposures.

#### Key to Abbreviations

Group 1 = Carcinogenic to humans. A3 = Animal carcinogen.

#### Reproductive Toxicity

##### Development of Offspring

May harm the unborn child. These effects are not considered relevant to occupational exposures.

##### Sexual Function and Fertility

May cause effects on sexual function and/or fertility. These effects are not considered relevant to occupational exposures.

##### Effects on or via Lactation

No information was located.

#### Germ Cell Mutagenicity

May be mutagenic based on limited evidence. These effects are not considered relevant to occupational exposures.

#### Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

#### Toxicity

##### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Ethanol	42 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour; fresh water)	2 mg/L (Daphnia magna (water flea); 48-hour; fresh water)		
1,2-Propylene glycol	Not available	10000 mg/L (Daphnia magna (water flea); 48-hour)		

##### Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Ethanol			< 6300 mg/L (Daphnia magna)	

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			(water flea); fresh water)	
1,2-Propylene glycol	52930 mg/L (Pimephales promelas (fathead minnow); 96 hrs)		Not available	

#### Persistence and Degradability

No information was located.

#### Bioaccumulative Potential

No information was located.

#### Mobility in Soil

No information was located.

#### Other Adverse Effects

There is no information available.

## SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	1987	ALCOHOLS (Ethanol)	3	III
US DOT	1987	ALCOHOLS (Ethanol)	3	III

**Environmental Hazards** Not applicable

**Special Precautions for User** Please note: In containers of 450L or less, this product meets the requirements for exemption under TDG regulation special provisions, part 1, section 1.36b: Class 3, Flammable liquids: Alcohol Exemption.  
In containers of 450L or less, this product meets the requirements of DOT exemption as per 49 CFR, section 173.150 (f).

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

## SECTION 15. REGULATORY INFORMATION

#### Safety, Health and Environmental Regulations

##### Canada

#### 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.

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## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Compliance and Regulatory Department

**Phone No.** 905-878-5544

**Date of Preparation** November 03, 2015

**Additional Information** We are committed to uphold the Industry Consumer Ingredient Communication Voluntary Initiative.

Please send us your request by visiting our website at [www.recochem.com](http://www.recochem.com).

Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without respect to order of predominance.

**Disclaimer**

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes 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. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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