



# PMC WATER SYSTEMS SERVICES INC.

## 124 CONNIE CRES. UNIT 9 CONCORD, ONTARIO.

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### SAFETY DATA SHEET C-2008-E

#### Protection Required



#### SECTION 1 – MATERIAL IDENTIFICATION AND USE

**Manufacturer's Name** : PMC Water Systems Services Inc.  
**Manufacturer's Address** : 124 Connie Crescent, Unit 9, Concord, ON L4K 1L7  
**Manufacturer's Phone #** : (905) 669-8262  
**24 Emergency Phone #** : Canutec (613) 996-6666  
**Product Identifier** : C-2008-E  
**Product Use** : Heat transfer fluid

#### SECTION 2 – COMPOSITION/INGREDIENTS OF MATERIAL

| Ingredients   | Concentration | CAS #   | LD <sub>50</sub>       | LC <sub>50</sub>                |
|---------------|---------------|---------|------------------------|---------------------------------|
| Ethyl Alcohol | 85-100%       | 64-17-5 | 7060 mg/kg, oral - rat | > 61 mg/L, 4 hr, (rat – vapour) |

#### SECTION 3 – HAZARDS IDENTIFICATION

**Hazard Statements** Flammable liquid and vapour. Causes serious eye irritation. Harmful if swallowed. Suspected of damaging the unborn child. Causes damage to organs. (eyes)

**Precautionary Statements** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use non-sparking tools. Take action to prevent static discharges. In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction. In case of fire: Use carbon dioxide (CO<sub>2</sub>), powder, alcohol-resistant foam to extinguish. Suspected of damaging the unborn child. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/ spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. If exposed: Call a Poison Center or doctor/physician. If swallowed: Rinse mouth. Do NOT induce vomiting. Call a Poison Center/doctor if you feel unwell. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash with plenty of soap and water thoroughly after handling. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Center/doctor. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

#### SECTION 4 – FIRST AID MEASURES

**Eye Contact** Immediately flush eyes with running water for at least 15 minutes. Obtain medical attention if irritation persists. Wash off with soap and plenty of water. If irritation or symptoms develop, seek medical attention. Wash contaminated clothing before re-use.

**Skin Contact** If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Get medical attention if symptoms persist.

**Inhalation** Call a physician or poison control centre immediately. Do not induce vomiting. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.

**Ingestion** Treat symptomatically. This product is a Central Nervous System depressant.

**Notes to Physician**

#### SECTION 5 – FIRE FIGHTING MEASURES

**Flammability** Flammable.  
**Flash Point** 16 °C, 61 °F Closed Cup

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| <b>Autoignition Temperature</b>                  | 422 °C, 792 °F   |
| <b>Extinguishing media</b>                       | Use water fog or fine spray, foams, carbon dioxide or dry chemical. Do not use a solid water stream as it may scatter and spread fire.   |
| <b>Specific Hazards</b>                          | Vapors may travel considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. Static discharge, impact, friction, and heat may ignite exposed chemical material.  |
| <b>Special Firefighting Procedures/Equipment</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Fight fires from a safe distance. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. |
| <b>Explosion Data</b>                            | May be sensitive to static discharge. Vapours in the flammable range may be ignited by a static discharge or sufficient energy. Not expected to be sensitive to mechanical impact.   |
| <b>Hazardous Combustion Products</b>             | Carbon monoxide, carbon dioxide, toxic vapours, gases or particulates.   |

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

|                                |   |
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| <b>Personal Precautions</b>    | Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Individuals involved in the cleanup must wear appropriate personal protective equipment.  |
| <b>Environment Precautions</b> | Prevent further leakage or spillage if safe to do so. Do not contaminate water.   |
| <b>Spill Response/Cleanup</b>  | Ventilate area of release. Stop spill or leak at source if safely possible. Dike for water control. Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with inert, non-combustible absorbent material (e.g. sand, vermiculite), then place material into open, unsealed containers. |

## SECTION 7 – HANDLING AND STORAGE

|                             |  |
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| <b>Handling</b>             | Use only in well-ventilated areas. Wear protective gloves and eye/face protection. Do not ingest or swallow. Avoid breathing vapours. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep away from heat and flame. Use only non-sparking tools with this material. Avoid contact with incompatible materials. Keep containers tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not use pressure to empty drums. Do not cut, weld, drill or grind on or near this container. |
| <b>Storage Requirements</b> | Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.   |

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

|                               |   |
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| <b>Ventilation</b>            | Ensure adequate ventilation, especially in confined areas. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.   |
| <b>Respiratory Protection</b> | Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA.   |
| <b>Skin Protection</b>        | Wear impervious chemical resistant gloves.  |
| <b>Eye/Face Protection</b>    | Chemical goggles are recommended. A full face shield may also be necessary.   |
| <b>Other Comments</b>         | Eye wash facilities and emergency shower must be available when handling this product. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not ingest, or eat, drink or smoke when using this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. |

| Ingredient    | ACGIH Threshold Limit Values |              | OSHA Threshold Limit Values |           |
|---------------|------------------------------|--------------|-----------------------------|-----------|
| Ethyl Alcohol | TWA N/Av                     | STEL 1000ppm | PEL 1900mg/m <sup>3</sup>   | STEL N/Av |

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|   |   |                             |
|---|---|-----------------------------|
| <b>Physical State</b>                     | : | Liquid                      |
| <b>Odour and Appearance</b>               | : | Alcohol; Clear, colourless. |
| <b>Odour Threshold</b>                    | : | 100 ppm                     |
| <b>Specific Gravity (Water = 1)</b>       | : | 0.79 at 20 °C               |
| <b>Vapour Pressure (mmHg)</b>             | : | 5.7                         |
| <b>Vapour Density (Air = 1)</b>           | : | 1.59                        |
| <b>Evaporation Rate</b>                   | : | 1.7                         |
| <b>Lower Flammability limit (by vol.)</b> | : | 3%                          |
| <b>Upper Flammability limit (by vol.)</b> | : | 20%                         |
| <b>Boiling Point</b>                      | : | 74-79°C; 165.2-174.2°F      |
| <b>Freezing/Melting Point</b>             | : | -114.1°C; -173.38°F         |
| <b>pH</b>                                 | : | Neutral                     |

Solubility in Water : Complete

## SECTION 10 – STABILITY AND REACTIVITY

|  |   |
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| <b>Stability/Reactivity</b>                | Stable under normal conditions.   |
| <b>Conditions for Chemical Instability</b> | Keep away from excessive heat, open flames, sparks and other possible sources of ignition. Avoid contact with incompatible materials. Do not use in areas without adequate ventilation. Avoid heat, open flames, sparks, static electricity and electrical equipment. |
| <b>Incompatible Materials</b>              | Strong oxidizing agents. Ammonia.   |
| <b>Hazardous Decomposition Products</b>    | None known refer to hazardous combustion products.  |
| <b>Hazardous Polymerization</b>            | Hazardous polymerization does not occur.  |

## SECTION 11 – TOXICOLOGICAL INFORMATION

|                                 |  |
|---------------------------------|--|
| <b>Target Organs</b>            | : Central nervous system. Eyes. Gastro-intestinal tract. Respiratory system. Skin.   |
| <b>Skin Contact</b>             | : May cause mild skin irritation.  |
| <b>Eye Contact</b>              | : May cause severe eye irritation.   |
| <b>Ingestion</b>                | : May cause gastrointestinal tract irritation. May be fatal or cause blindness if swallowed.                                     |
| <b>Inhalation</b>               | : May cause respiratory irritation.  |
| <b>Chronic Exposure Effects</b> | : Chronic skin contact with low concentrations may cause dermatitis. Prolonged or repeated overexposure may cause kidney damage. |
| <b>Irritancy</b>                | : May be irritating to the skin. May cause eye irritation.   |
| <b>Sensitization</b>            | : Not expected to be a skin or respiratory sensitizer.   |
| <b>Carcinogenicity</b>          | : No components listed as carcinogen by ACGIH, IARC, OSHA or NTP.  |
| <b>Teratogenicity</b>           | : Hazardous by WHMIS criteria. Avoid exposure to women during early pregnancy.   |
| <b>Mutagenicity</b>             | : Not expected to be mutagenic in humans.  |
| <b>Reproductive Effects</b>     | : Suspected of damaging the unborn child.  |

## SECTION 12 – ECOLOGICAL INFORMATION

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| <b>Ecotoxicity</b>                     | Not expected to cause hazardous effects to the environment. |
| <b>Potential Environmental Effects</b> | May cause long-term adverse effects in the environment.     |
| <b>Persistence and Degradability</b>   | Readily biodegradable                                       |

## SECTION 13 – DISPOSAL CONSIDERATIONS

|                       |  |
|-----------------------|--|
| <b>Waste Disposal</b> | Dispose in accordance with federal, provincial or local government requirements. Contact your local provincial or federal environmental agency for specific regulations. |
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## SECTION 14 – TRANSPORT INFORMATION

|                                 |   |
|---------------------------------|---|
| <b>TDG Shipping Regulations</b> | UN 1170, Ethanol Solution, Class 3, PG II                               |
| <b>Domestic Substances List</b> | All ingredients are listed on the DSL or are not required to be listed. |

## SECTION 15 – REGULATORY INFORMATION

|                             |   |
|-----------------------------|---|
| <b>WHMIS Classification</b> | : Class B2: Flammable Liquid<br>Class D2B: Toxic Material |
|-----------------------------|---|

## SECTION 16 – OTHER INFORMATION

|                          |   |
|--------------------------|---|
| <b>Prepared by:</b>      | Lab Services<br>PMC Water Systems Services Inc.<br>124 Connie Crescent, Unit 9<br>Concord, ON L4K 1L7 |
| <b>Preparation Date:</b> | November 12, 2018   |

While all the data presented is believed to be accurate at the time of preparation, PMC Water Systems Services Inc. makes no warranty; the data is offered for your consideration, investigation and verification.