Section 1. Product and Company Identification

Product name / Trade name: RainX De-icer Premium Washer Fluid -40C

Synonym: Not available.

Chemical family: Not available.

Chemical formula: Not available.

Manufacturer/Supplier: Recochem Inc.
850 Montee de Liesse
Montreal, Quebec
514-341-3550

Material uses: Consumer products: Windshield de-icing fluid.

Section 2. Hazards identification

Emergency Overview
WARNING!

NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.

Potential Acute Health Effects

See section 11 for more detailed information on health effects and symptoms.

Extremely hazardous by the following route of exposure: ingestion. Hazardous by the following route of exposure: inhalation. Slightly hazardous by the following route of exposure: skin contact (irritant, permeator), of eye contact (irritant). Non-sensitizer to skin. Severe over-exposure can result in death.

Note to Physician

Acute exposure to methanol, either through ingestion or breathing high airborne concentrations can result in symptoms appearing between 40 minutes and 72 hours after exposure. Symptoms and signs are usually limited to CNS, eyes and gastrointestinal tract. Because of the initial CNS’s effects of headache, vertigo, lethargy and confusion, there may be an impression of ethanol intoxication. Blurred vision, decreased acuity and photophobia are common complaints. Treatment with ipecac or lavage is indicated in any patient presenting within two hours of ingestion. A profound metabolic acidosis occurs in severe poisoning and serum bicarbonate levels are a more accurate measure of severity than serum methanol levels. Treatment protocols are available from most major hospitals and early collaboration with appropriate hospitals is recommended.

Section 3. Composition, information on ingredients

Canada

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>Conc. (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>40 - 50</td>
</tr>
</tbody>
</table>

Continued on next page
There are no other ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Section 4. First aid measures**

| Eye contact | Immediately flush eyes with plenty of water for at least 30 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
| Skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Inhalation | Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Ingestion | Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Notes to physician | See section 2
Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |

**Section 5. Fire-fighting measures**

| Products of combustion | No specific data. |
| Fire-fighting media and instructions | Use an extinguishing agent suitable for the surrounding fire. |
| Fire Hazards | Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition, it emits acrid smoke and irritating fumes. |
| Explosion Hazards | Highly flammable liquid and vapor. |

**Section 6. Accidental release measures**

| Small spill and leak | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| Large spill and leak | Stop leak if without risk. Move containers from spill area. 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). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal. |

*Continued on next page*
**Section 7. Handling and Storage**

**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.

**Storage**
Store in accordance with local regulations. 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. 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.

**Section 8. Exposure controls/personal protection**

**Engineering controls**
No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

**Personal protection**

**Eyes**
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

**Body**
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory**
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Hands**
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): nitrile rubber

**United States**

**Product name**
Methanol

**Exposure limits**

ACGIH TLV (United States, 1/2008). Absorbed through skin.

- TWA: 200 ppm 8 hour(s).
- TWA: 262 mg/m³ 8 hour(s).
- STEL: 250 ppm 15 minute(s).
- STEL: 328 mg/m³ 15 minute(s).


- TWA: 200 ppm 8 hour(s).
- TWA: 260 mg/m³ 8 hour(s).
- STEL: 250 ppm 15 minute(s).
- STEL: 325 mg/m³ 15 minute(s).

NIOSH REL (United States, 6/2008). Absorbed through skin.

- TWA: 200 ppm 10 hour(s).
- TWA: 260 mg/m³ 10 hour(s).
Section 9. Physical and chemical properties

Physical State and Appearance  Liquid.
Molecular weight  Not available.
pH  8 to 11
Boiling/condensation point  Not available.
Melting/freezing point  Not available.
Relative density  0.9 to 0.97
Vapor pressure  <12.8 kPa (<96 mm Hg)
Vapour Density  <1.11 [Air = 1]
VOC content  Not available.
Odour  Alcohol. [Slight]
Taste  Not available.
Colour  Yellow.
Volatile  Not available.
Evaporation rate  2.1 compared to Butyl acetate.
Odour Threshold  Not available.
Viscosity  Not available.
Solubility  Soluble in water.
Other Properties  Not available.

The product is:  May be combustible at high temperature.
Auto-ignition temperature  385°C (725°F)
Flash point  Closed cup: 28°C (82.4°F) [Tagliabue.]
Flammable limits  Lower: 6%
                  Upper: 36%
Section 10. Stability and reactivity

Stability
The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions of instability
Not available.

Incompatibility with various substances
Slightly reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Canada

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>64000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>15800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>15840 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>5600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>5600 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary
Not available.

Chronic toxicity

Conclusion/Summary
Not available.

Carcinogenicity

Conclusion/Summary
May be fatal or cause blindness if swallowed.

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>EPA</th>
<th>NIOSH</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>A5</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>None</td>
</tr>
</tbody>
</table>

Mutagenicity

Conclusion/Summary
Not available.

Teratogenicity

Conclusion/Summary
Not available.

Reproductive Toxicity

Conclusion/Summary
Not available.
Section 12. Ecological information

For accidental discharges into the environment, see Section 6: “Accidental Release Measures” for suggested instructions.

Ecotoxicity

: No known significant effects or critical hazards.

Canada

Aquatic ecotoxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>Acute LC50 2500000 ug/L Marine water</td>
<td>Crustaceans - Crangon crangon - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 3289 to 4395 mg/L Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate - &lt;24 hours</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 &gt;100000 ug/L Fresh water</td>
<td>Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.

Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. 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.

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

Section 14. Transport information

<table>
<thead>
<tr>
<th>Canada TDG Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
</tr>
<tr>
<td>Subsidiary class</td>
</tr>
</tbody>
</table>

Proper Shipping Name (Canada) TDG

Windshield washer antifreeze, Alcohol exempt.

UN number

Not applicable.

Packing Group

Not applicable.

Special provisions

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.

Continued on next page
### IMDG Classification

<table>
<thead>
<tr>
<th>Class</th>
<th>Class 3: Flammable liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidiary class</td>
<td>-</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Alcohols, n.o.s. (Methanol)</td>
</tr>
<tr>
<td>IMDG</td>
<td></td>
</tr>
<tr>
<td>UN number</td>
<td>UN 1987</td>
</tr>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
</tbody>
</table>

**Marine pollutant**

Not a pollutant.

**Special provisions**

- Emergency schedules (EmS)
  - 3-06

**Remarks**

In a means of containment of 5 L capacity or less this product is classified as a "Limited Quantity".

### United States DOT (Classification)

<table>
<thead>
<tr>
<th>Class</th>
<th>Class 3: Flammable liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidiary class</td>
<td>-</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Alcohols, n.o.s. (Methanol)</td>
</tr>
<tr>
<td>(United States) DOT</td>
<td></td>
</tr>
<tr>
<td>UN number</td>
<td>UN 1987</td>
</tr>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
</tbody>
</table>

**Special provisions**

In containers of 5 L (5Kg) capacity or less this product is classified as a "Consumer Commodity" under DOT regulations.

### International Air Transport Association (IATA)

For air shipment classification and associated regulations, please refer to the latest edition of IATA Dangerous Goods Regulations.

### Section 15. Regulatory information

**WHIMIS Classification (Canada)**

- Class B-2: Flammable liquid
- Class D-1B: Material causing immediate and serious toxic effects (Toxic).
- Class D-2A: Material causing other toxic effects (Very toxic).
- Class D-2B: Material causing other toxic effects (Toxic).

**Canada Domestic Substances List (DSL) Status**

This product and/or all of its components are on the DSL.

**HCS Classification (U.S.A.)**

Not regulated.

**U.S.A. Regulatory Lists**

This product and/or all of its components are on the TSCA inventory list.

*Continued on next page*
Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

National Fire Protection Association (U.S.A.)

Section 16. Other information


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.

MSDS are available at www.recochem.com