Sierra Concentrate Antifreeze & Coolant
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Sierra Concentrate Antifreeze & Coolant

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Automotive Engine Antifreeze & Coolant

1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC
4065 Commercial Ave.
Northbrook, IL 60062 - USA
T (847) 559-2000
www.oldworldind.com

1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Not classified

2.2. Label elements

GHS-US labelling
Signal word (GHS-US) : None
Hazard statements (GHS-US) : None
Precautionary statements (GHS-US) : None

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% by wt</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>propylene glycol</td>
<td>(CAS No) 57-55-6</td>
<td>94 - 96</td>
<td>Not classified</td>
</tr>
<tr>
<td>water</td>
<td>(CAS No) 7732-18-5</td>
<td>&lt;= 4</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Not expected to present a significant skin hazard under anticipated condition of normal use.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after skin contact: Contact during a long period may cause slight irritation.
Symptoms/injuries after eye contact: May cause slight irritation.
Symptoms/injuries after ingestion: Excessive ingestion may cause central nervous system effects.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
Reactivity: Stable.

5.3. Advice for firefighters
Special protective equipment for fire fighters: Protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves). Wear positive pressure self-contained breathing apparatus (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
No additional information available

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
For containment: Collect spillage. Contain released substance, pump into suitable containers.
Methods for cleaning up: Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Personal protective equipment: Face shield. Protective goggles.
Hand protection: Not required for normal conditions of use.
Eye protection: Chemical goggles or face shield.
Respiratory protection: If exposed to levels above exposure limits wear appropriate respiratory protection.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Color: Green
Odor: Odorless
Odor threshold: No data available
Relative evaporation rate (butylacetate=1): Slight
Melting point: -60 °C (-76 °F)
Freezing point: No data available
Boiling point: 154 °C (310 ºF)
Flash point: 104 °C (219 ºF) Method used: Penksy-Martens Closed Cup
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: < 0.01 kPa (< 0.1 mm Hg)
Relative vapor density at 20 °C: 2.6
Specific Gravity: 1.04
Density: 1.04 kg/l (8.7 lbs/gal)
Solubility: Water: Complete
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: Not applicable.
Oxidizing properties: Not applicable.
Explosive limits: 2.6 - 12.5 vol % Estimated

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials
Keep away from strong acids, strong bases and oxidizing agents.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

propylene glycol (57-55-6)

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>20,000 mg/kg (Rat; Experimental value, Rat; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>22,500 mg/kg (Rat; Experimental value, Rat; Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>20,800 mg/kg (Rabbit; Experimental value, Rabbit; Experimental value)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>20,000 mg/kg bodyweight</td>
</tr>
</tbody>
</table>
Sierra Concentrate Antifreeze & Coolant
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (dermal)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
</tr>
<tr>
<td>Carcinogenicity</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
</tr>
<tr>
<td>Aspiration hazard</td>
</tr>
<tr>
<td>Symptoms/injuries after skin contact</td>
</tr>
<tr>
<td>Symptoms/injuries after eye contact</td>
</tr>
<tr>
<td>Symptoms/injuries after ingestion</td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

**12.1. Toxicity**

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>LC50 other aquatic organisms 1</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
</tr>
<tr>
<td>LC50 fish 2</td>
</tr>
<tr>
<td>TLM fish 1</td>
</tr>
<tr>
<td>TLM other aquatic organisms 1</td>
</tr>
<tr>
<td>Threshold limit other aquatic organisms 1</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
</tr>
<tr>
<td>Threshold limit algae 2</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
</tr>
<tr>
<td>ThOD</td>
</tr>
<tr>
<td>BOD (%) of ThOD</td>
</tr>
</tbody>
</table>

**12.3. Bioaccumulative potential**

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
</tr>
</tbody>
</table>

**12.4. Mobility in soil**

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
</tr>
</tbody>
</table>

**12.5. Other adverse effects**

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on ozone layer</td>
</tr>
<tr>
<td>Effect on global warming</td>
</tr>
</tbody>
</table>

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

<table>
<thead>
<tr>
<th>propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste disposal recommendations</td>
</tr>
</tbody>
</table>
## SECTION 14: Transport information

In accordance with DOT

Not a dangerous good in sense of transport regulations

Other information: Not regulated.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Sierra Concentrate Antifreeze &amp; Coolant</th>
<th>Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed</th>
</tr>
</thead>
</table>

### 15.2. International regulations

#### CANADA

<table>
<thead>
<tr>
<th>Sierra Concentrate Antifreeze &amp; Coolant</th>
<th>This product is not a WHMIS controlled product in Canada. Refer elsewhere in the SDS for specific warnings and safe handling information. Refer to the employer's workplace education program.</th>
</tr>
</thead>
</table>

**WHMIS Classification**

This product is not a WHMIS controlled product in Canada. Refer elsewhere in the SDS for specific warnings and safe handling information. Refer to the employer’s workplace education program.

#### EU-Regulations

No additional information available

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

Not classified

### 15.2.2. National regulations

<table>
<thead>
<tr>
<th>Sierra Concentrate Antifreeze &amp; Coolant</th>
<th>DSL (Canada): The intentional ingredients of this product are listed. ECL (South Korea): The intentional ingredients of this product are listed. EINECS (Europe): The intentional ingredients of this product are listed. ENCS (Japan): The intentional ingredients of this product are listed</th>
</tr>
</thead>
</table>

#### 15.3. US State regulations

<table>
<thead>
<tr>
<th>1,2-propanediol (57-55-6)</th>
<th>U.S. - Pennsylvania - RTK (Right to Know) List</th>
</tr>
</thead>
</table>

### SECTION 16: Other information
Sierra Concentrate Antifreeze & Coolant
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>HMIS III Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0 Minimal Hazard - No significant risk to health</td>
</tr>
<tr>
<td>Flammability</td>
<td>1 Slight Hazard</td>
</tr>
<tr>
<td>Physical</td>
<td>0 Minimal Hazard</td>
</tr>
</tbody>
</table>

Old World Industries, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, LLC as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, LLC assume liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.