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

1.1. Product identifier

Trade name: CL115 PAG Refrigeration Lubricant 46 + U/V Dye
Product code: CL115

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

Use of the substance/mixture: Polyalkylene Glycol based lubricant with ultraviolet leak detection dye to help detect leaks in air conditioning systems.

1.3. Details of the supplier of the safety data sheet

Tire Seal, Inc.
3574 Corona Street
33461 Lake Worth, Florida - USA
T 561-582-2245 - F 561-582-1499
www.supercool.ac

1.4. Emergency telephone number

Emergency number: USA PHONE:1-800-373-7542, INT'L: 1-484-951-2432
DGA/AAG ENVIRONMENTAL CONTRACT: DGA4000-048

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US):
Not classified

2.2. Label elements

GHS-US labeling:
No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable
Full text of H-phrases: see section 16

3.2. Mixture

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. 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.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available
5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,6-di-tert-butyl-p-cresol (128-37-0)

<table>
<thead>
<tr>
<th>USA ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: The use of gloves impervious to the specific material handled is advised to prevent skin contact. Suggested protective material: Nitrile, 4.5 mil thickness, tested at 3.5 mil and above with no breakthrough time after 240 minutes.

Eye protection: Chemical goggles or safety glasses.

Respiratory protection: Where there is potential for airborne exposure above the exposure limit an approved air purifying respirator equipped with Type P2 - Medium efficiency particle filters may be used.

Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Color</td>
<td>Reddish Green Tint.</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
</tbody>
</table>
CL115 PAG Refrigeration Lubricant 46 + U/V Dye
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point: > 200 °C
Flash point: 174 °C Closed Cup
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
Solubility: No data available
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: 41.4 - 50.6 cSt @40°C
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosive limits: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon Dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

2,6-di-tert-butyl-p-cresol (128-37-0)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>890 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; &gt;6000 mg/kg bodyweight; Rat)</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2000 mg/kg (Rat; Literature study; OECD 402: Acute Dermal Toxicity; &gt;2000 mg/kg bodyweight; Rat; Experimental value)</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>890.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Based on available data, the classification criteria are not met
Carcinogenicity: Not classified

2,6-di-tert-butyl-p-cresol (128-37-0)

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
</tbody>
</table>
SECTION 12: Ecological information

12.1. Toxicity

Ecology - water: Toxic to aquatic life.

<table>
<thead>
<tr>
<th>Compound</th>
<th>LC50 fish</th>
<th>EC50 Daphnia</th>
<th>Threshold limit algae 1</th>
<th>Threshold limit algae 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-di-tert-butyl-p-cresol (128-37-0)</td>
<td>0.199 mg/l (96 h; Pisces)</td>
<td>0.48 mg/l (48 h; Daphnia magna; GLP)</td>
<td>&gt; 0.4 mg/l (72 h; Scenedesmus subspicatus; GLP)</td>
<td>0.363 mg/l (Algae; Chronic)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

CL115 PAG Refrigeration Lubricant 46 + U/V Dye

Persistence and degradability: Not established.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>tricresyl phosphates, mixture of isomers, conc o-tricresyl phosphate&gt;95% (1330-78-5)</td>
<td>Readily biodegradable in water.</td>
</tr>
</tbody>
</table>

Biochemical oxygen demand (BOD): 0.51 g O₂/g substance
Chemical oxygen demand (COD): 2.27 g O₂/g substance
ThOD: 2.977 g O₂/g substance
BOD (% of ThOD): 0.17 % ThOD

12.3. Bioaccumulative potential

CL115 PAG Refrigeration Lubricant 46 + U/V Dye

Bioaccumulative potential: Not established.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>tricresyl phosphates, mixture of isomers, conc o-tricresyl phosphate&gt;95% (1330-78-5)</td>
<td>Potential for bioaccumulation (500 ≤ BCF ≤ 5000).</td>
</tr>
<tr>
<td>2,6-di-tert-butyl-p-cresol (128-37-0)</td>
<td>Log Pow 5.11 (Experimental value)</td>
</tr>
</tbody>
</table>

BCF fish 1: 230 - 2500 (56 days; Cyprinus carpio)
Log Pow: 5.1 (Experimental value)
Bioaccumulative potential: Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

12.4. Mobility in soil

2,6-di-tert-butyl-p-cresol (128-37-0)

Ecology - soil: May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information: No supplementary information available.

Overland transport: Not regulated
Transport by sea: Not regulated
CL115 PAG Refrigeration Lubricant 46 + U/V Dye
Safety Data Sheet

Air transport
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations
No additional information available

15.2. International regulations

CANADA

<table>
<thead>
<tr>
<th>CL115 PAG Refrigeration Lubricant 46 + U/V Dye</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHMIS Classification</td>
</tr>
<tr>
<td>Class D Division 2 Subdivision B - Toxic material causing other toxic effects</td>
</tr>
</tbody>
</table>

EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

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

15.2. National regulations
No additional information available

15.3. US State regulations

<table>
<thead>
<tr>
<th>CL115 PAG Refrigeration Lubricant 46 + U/V Dye()</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
</tr>
</tbody>
</table>

tricresyl phosphates, mixture of isomers, conc o-tricresyl phosphate>95% (1330-78-5)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

2,6-di-tert-butyl-p-cresol (128-37-0)

<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 1 - Must be preheated before ignition can occur.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

SDS US (GHS HazCom 2012) - TSI

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