Radiance
Cooling System Corrosion Inhibitor

Product Description
Radiance is a highly concentrated liquid, multi-metal safe corrosion inhibitor for use in engine cooling systems to protect from premature failure due to corrosion. Radiance is packaged as a convenient liquid capable of being added directly into filler necks of cooling water systems. Radiance dissolves instantly in water and will not freeze in cold weather months. Radiance contains a concentrated, vivid tracer dye designed for detecting water leaks in water cooled engines.

Performance Features
• Inhibits Corrosion Of All Metals Including: Cast Iron, Steel, Copper, Brass, Solder, and Aluminum
• Complies With EMD Specifications for Corrosion Inhibition In Locomotive Cooling Systems
• Passes ASTM D-1384 at Concentration Levels of 2 fl oz./Gallon
• Does Not Contain Chromate Or Zinc Metal Compounds
• Used Solutions Are Normally Regarded As Non-Regulated And Biodegradable Upon Disposal
• Contains Boron As A Tracer Element To Simplify Diction Of Coolant Contamination in Engine Oil and External Cooling System Water Leaks
• Can Be Used With Ethylene Glycol Based Antifreezes
• Proven Track Record - Used by Class I Railroad For Many Trouble Free Years of Performance

Physical Specifications

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (Concentrate)</td>
<td>Red</td>
</tr>
<tr>
<td>Appearance (Dilute)</td>
<td>Green</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>12</td>
</tr>
</tbody>
</table>

Equipment Requirements
Radiance is safe for use with all engine cooling systems.

Product Make-Up
Radiance is a highly concentrated cooling system corrosion inhibitor. Dilute to specified strength concentrations.
Concentration and Application Methods

Engine Cooling System Corrosion Inhibition

Add Radiance directly to cooling system at a dilution rate of 2 fl oz. per gallon of cooling system water or approximately 4.6 gallons per 300 gallon cooling system. Radiance can be used in both open and closed recirculating systems. In closed cooling water systems, product life is normally indefinite.

Leak Tracing / Detection

For leak tracing with a freshly treated engine, operate system to mix and circulate Radiance throughout the cooling system. Bring engine system to full operating temperature and pressure. Be sure all thermostats and valves within the system are open. Shut down engine and inspect entire cooling system using a "black light" for the vivid yellow-green color of Radiance’s tracer dye.

Testing Radiance Concentration Levels

The concentration of RADIANCE can be tested by Seacole’s Nitrite Test Kit. Nitrite test readings should be in the range of 800 - 1200 ppm Nitrite. Conductivity test readings should be in the range of 4000 - 4500 micromohs.

Companion Products

See Seacole’s Railroad and Heavy Equipment product line.

Safety and Handling

Read and understand this product’s MSDS before handling.

Waste Treatment

Individual users should verify the nature of spent solutions to assure compliance with local, state, and federal regulations. Contact Seacole for specific details and/or further waste treatment recommendations.

Ordering Information

Radiance is available in 5 gallon pails, 55 gallon drums, 250 gallon totes, and 275 gallon totes.