STATIONARY ENGINE COOLANTS

Built for Maximum Durability and Protection

ToughinAL® Heavy Duty Stationary Engine Coolants are specially formulated for the demanding requirements of stationary engines. This glycol-based line of thermal products is fortified with a superior state-of-the-art inhibitor and dispersant package that protects against premature corrosion and metal cavitation and enhances fluid durability and equipment life. ToughinAL® was chosen by customers over heavy-duty pre-charge because it has significantly less inhibitor loss and a lower cost of ownership.

Over a three month study of ToughinAL® versus HD PC, utilizing a CAT 3520 at 230° F in continuous operation, ToughinAL® met ASTM D6210 chemical requirements post-study.

Cost of Ownership

<table>
<thead>
<tr>
<th></th>
<th>Standard HD PC Coolant</th>
<th>ToughinAL® EG HD</th>
<th>ToughinAL® EG N</th>
<th>ToughinAL® EG NF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost (%)</td>
<td>Base</td>
<td>-45%</td>
<td>-63%</td>
<td>-70%</td>
</tr>
</tbody>
</table>

ToughinAL® EG HD

- Formulated with virgin ethylene glycol for superior heat transfer capabilities and more efficient freeze protection
- Hybrid technology
- Proven heavy duty protection: 63% less inhibitor loss compared to conventional heavy duty coolant
- Works in most heavy duty applications
- Ideal for use in applications using CAT NGEC/DEAC and most other stationary engine coolant OEMs
- Maintain using ToughinAL SCA

ToughinAL® EG N

- Formulated with virgin ethylene glycol for superior heat transfer capabilities and more efficient freeze protection
- Proven heavy duty protection: meets or exceeds ASTM D6210 requirements
- Nitrited OAT technology provides extended service life
- Molybdate extends heavy duty cavitation protection beyond that of a conventional technology coolant
- Ideal for CAT EC-1, GE Waukesha, Agco/Massey Ferguson, MWM Deutz, and MTU. Works in most heavy duty applications
- Maintain using ToughinAL Extender N

ToughinAL® EG NF

- Formulated with virgin ethylene glycol for superior heat transfer capabilities and more efficient freeze protection
- Proven heavy duty protection: meets or exceeds ASTM D6210 requirements
- More forgiving in harsh environments: nitrite-free organic acid technology for better resistance to high heat applications and extended life protection
- Molybdate extends heavy duty cavitation protection beyond that of a conventional technology coolant
- State-of-the-art technology for modern heavy duty engines
- Ideal for GE Jenbacher, MAN, MWM Deutz, and MTU

ToughinAL® PG

- Formulated with virgin propylene glycol for superior heat transfer capabilities and more efficient freeze protection
- Proven heavy duty protection: meets or exceeds ASTM D6210 requirements
- Recommended for customers requiring the lower toxicity of a PG-based coolant
- Works in most heavy duty applications
ToughinAL® Stationary Engine Coolants

ToughinAL® Stationary Engine Coolants are used in these applications:

- Stationary Engines
- Line Heaters
- Natural Gas Well Head Heaters
- LNG Vaporizers
- Oil Refineries
- Power Generating
- Chemical Manufacturers
- Combustion Air Pre-Heaters
- Marine Engines
- Standby Generators
- Drilling Equipment
- Compressor Engines
- Process Heating and Cooling
- Solar and Radiant Heating Systems

ToughinAL® Stationary Engine Coolants can be used in these systems*:

- Agco
- Ajax
- Caterpillar
- Cooper Bessemer
- Cummins
- Deutz
- Dresser-Rand
- Enterprise
- Fendt
- Guascor
- International
- John Deere
- Kubota
- MAN
- Mercedes
- MTU
- MWM
- Navistar
- Siemens
- Superior
- Volvo/Mack
- Waukesha

*Contact your sales representative for more information regarding specific specifications or OEMs that are not listed.

ToughinAL® Stationary Engine Coolants

<table>
<thead>
<tr>
<th>Typical Properties</th>
<th>ToughinAL® Stationary Engine Coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>EG HD 50/50</td>
</tr>
<tr>
<td>Glycol</td>
<td>Ethylene Glycol</td>
</tr>
<tr>
<td>Specific Gravity @ 68°F</td>
<td>1.084</td>
</tr>
<tr>
<td>pH</td>
<td>8.0 - 8.8</td>
</tr>
<tr>
<td>Reserve Alkalinity, ml</td>
<td>5.0 Min</td>
</tr>
<tr>
<td>Freeze Point, F° (°C)</td>
<td>-34(-37) Max</td>
</tr>
<tr>
<td>Service Check Interval, Hrs.</td>
<td>3,000</td>
</tr>
</tbody>
</table>

Helpful Shipping Information

<table>
<thead>
<tr>
<th>Steel Drums Qty</th>
<th>EG HD 50/50</th>
<th>EG N 50/50</th>
<th>EG NF 50/50</th>
<th>PG 50/50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package Dimensions</td>
<td>55 Gallons</td>
<td>55 Gallons</td>
<td>55 Gallons</td>
<td>55 Gallons</td>
</tr>
<tr>
<td>Gross Container Weight</td>
<td>≈532 Pounds</td>
<td>≈533 Pounds</td>
<td>≈505 Pounds</td>
<td></td>
</tr>
<tr>
<td>Gross Weight on Pallet</td>
<td>≈2191 Pounds</td>
<td>≈2196 Pounds</td>
<td>≈2081 Pounds</td>
<td></td>
</tr>
<tr>
<td>Quantity Per Pallet</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Pallet Dimensions</td>
<td>48” x 48” x 39.4”</td>
<td>48” x 48” x 39.4”</td>
<td>48” x 48” x 39.4”</td>
<td>48” x 48” x 39.4”</td>
</tr>
<tr>
<td>Dilution</td>
<td>50/50</td>
<td>50/50</td>
<td>50/50</td>
<td>50/50</td>
</tr>
</tbody>
</table>

ToughinAL® Stationary Engine Coolant Products Available

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Dilution</th>
<th>Size</th>
<th>Part Number</th>
<th>UPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ToughinAL EG HD</td>
<td>50/50</td>
<td>Bulk</td>
<td>10085</td>
<td>N/A</td>
</tr>
<tr>
<td>ToughinAL EG HD</td>
<td>50/50</td>
<td>Tote</td>
<td>10084</td>
<td>652138101007</td>
</tr>
<tr>
<td>ToughinAL EG HD</td>
<td>50/50</td>
<td>Drum</td>
<td>10086</td>
<td>652138100994</td>
</tr>
<tr>
<td>ToughinAL EG N</td>
<td>50/50</td>
<td>Bulk</td>
<td>12116</td>
<td>N/A</td>
</tr>
<tr>
<td>ToughinAL EG N</td>
<td>50/50</td>
<td>Tote</td>
<td>12118</td>
<td>652138104213</td>
</tr>
<tr>
<td>ToughinAL EG N</td>
<td>50/50</td>
<td>Drum</td>
<td>12117</td>
<td>652138104206</td>
</tr>
<tr>
<td>ToughinAL EG NF</td>
<td>50/50</td>
<td>Bulk</td>
<td>10091</td>
<td>N/A</td>
</tr>
<tr>
<td>ToughinAL EG NF</td>
<td>50/50</td>
<td>Tote</td>
<td>11593</td>
<td>652138100987</td>
</tr>
<tr>
<td>ToughinAL EG NF</td>
<td>50/50</td>
<td>Drum</td>
<td>10092</td>
<td>652138101021</td>
</tr>
<tr>
<td>ToughinAL PG</td>
<td>50/50</td>
<td>Bulk</td>
<td>10088</td>
<td>N/A</td>
</tr>
<tr>
<td>ToughinAL PG</td>
<td>50/50</td>
<td>Tote</td>
<td>12203</td>
<td>652138104268</td>
</tr>
<tr>
<td>ToughinAL PG</td>
<td>50/50</td>
<td>Drum</td>
<td>12202</td>
<td>652138104275</td>
</tr>
<tr>
<td>ToughinAL SCA</td>
<td>RTU</td>
<td>Pail</td>
<td>Coming Soon</td>
<td></td>
</tr>
<tr>
<td>ToughinAL Extender N</td>
<td>RTU</td>
<td>Pail</td>
<td>Coming Soon</td>
<td></td>
</tr>
</tbody>
</table>

All reasonable care has been taken to ensure that the information contained herein is accurate as of the date of printing. Freedom to use any patent owned by KOST® USA, Inc. or others is not to be inferred from any statement contained herein. Test results listed are typical properties only. Formula and blending changes may result in slight color or appearance changes.

ToughinAL® Stationary Engine Coolants

ToughinAL® Stationary Engine Coolants are used in these applications:

- Stationary Engines
- Line Heaters
- Natural Gas Well Head Heaters
- LNG Vaporizers
- Oil Refineries
- Power Generating
- Chemical Manufacturers
- Combustion Air Pre-Heaters
- Marine Engines
- Standby Generators
- Drilling Equipment
- Compressor Engines
- Process Heating and Cooling
- Solar and Radiant Heating Systems

ToughinAL® Stationary Engine Coolants can be used in these systems*:

- Agco
- Ajax
- Caterpillar
- Cooper Bessemer
- Cummins
- Deutz
- Dresser-Rand
- Enterprise
- Fendt
- Guascor
- International
- John Deere
- Kubota
- MAN
- Mercedes
- MTU
- MWM
- Navistar
- Siemens
- Superior
- Volvo/Mack
- Waukesha

*Contact your sales representative for more information regarding specific specifications or OEMs that are not listed.