NA-LUBE® EP-5310

NA-LUBE EP-5310 is a light colored, low odor inactive sulfurized fatty acid ester/fatty oil with excellent extreme pressure properties.

CHEMICAL COMPOSITION: Sulfurized fatty acid ester/fatty vegetable oil.

APPEARANCE: Brown clear liquid.

TYPICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur Content</td>
<td>10.0%</td>
</tr>
<tr>
<td>Active Sulfur Content (ASTM D 1662)</td>
<td>&lt;1.0%</td>
</tr>
<tr>
<td>Color (ASTM D 1500 neat)</td>
<td>5.5</td>
</tr>
<tr>
<td>Viscosity @ 40°C (ASTM D 445, DIN 51 550)</td>
<td>240 mm²/s (cSt)</td>
</tr>
<tr>
<td>Density @ 20.0°C (ASTM D 941)</td>
<td>0.94 g/ml</td>
</tr>
<tr>
<td>Weight Per Gallon @ 25°C</td>
<td>8.09 lbs.</td>
</tr>
<tr>
<td>Flash Point, COC (ASTM D 92, DIN 51 376)</td>
<td>195°C (383°F)</td>
</tr>
</tbody>
</table>

Note: The above analytical data are not specifications.

APPLICATIONS:

- Metalworking Fluids: 4.0% - 10.0%
- Water Miscible Metalworking Concentrates: 5.0% - 20.0%
- Industrial Gear Oils: 1.0% - 1.2%
- Slideway Oils: 1.0% - 5.0%
- Automotive Gear Oils: 1.0% - 2.0%
- Greases: 1.0% - 5.0%

NA-LUBE EP-5310 is a low odor, light colored sulfur carrier based on fatty acid ester/fatty oil chemistry. It has excellent solubility in naphthenic and Group I and II mineral oils and ester basestocks for industrial lubricants, greases and neat metalworking fluids. NA-LUBE EP-5310’s novel chemistry provides improved lubricity over similar inactive sulfur fatty acid ester type extreme pressure additives. When used in combination with appropriate metal-containing or ashless phosphorus-containing antiwear or lubricity additives, NA-LUBE EP-5310 provides excellent extreme pressure properties and offers an alternative to chlorinated paraffins in metalworking fluids, especially for cutting operations.

ADVANTAGES:

- Good extreme pressure properties
- Light color, low odor, inactive
- Usable with ferrous and non-ferrous metals
- Easy handling, low viscosity
- Good solubility in Group I, II and naphthenic base oils

(see reverse side)
NA-LUBE® EP-5310

**SOLUBILITY:** Soluble in petroleum and synthetic lubricant base stocks and most common solvents. Insoluble in water. However, it is recommended to verify the solubility in the base oils used and the compatibility with other additives.

**STANDARD PACKAGING:** 441 lbs (200 kg) closed head drum.

**STORAGE CONDITIONS:** Store in a cool, dry place away from any direct source of heat and moisture. Maximum recommended storage temperature: 30°C (86°F)

**SHELF LIFE:** Best if used within 1 year from the date of manufacture.

**HANDLING:** Avoid all personal contact. Observe good personal hygiene. For additional information, it is advised to consult the Safety Data Sheet (SDS) for NA-LUBE EP-5310.

**REGISTRATION:** Please refer to Section 15 of the Safety Data Sheet for information.

For Samples or Technical Service, contact King Industries or your King representative.

King Industries, Inc.  
Science Road  
Norwalk, CT 06852-0588  
Tel: 203-866-5551  
Fax: 203-866-0425  
E-mail: LAD@kingindustries.com

King Industries International, Inc.  
Science Park 402,  
1098 XH Amsterdam  
Tel: +31-20-723-1970  
E-mail: info@kingintl.nl

NA-LUBE® is a registered trademark of King Industries, Inc.