

# NA-LUBE<sup>®</sup> EP-5316

## Extreme Pressure/Antiwear Performance Data

**NA-LUBE EP-5316** is a sulfurized fatty acid ester that imparts good extreme pressure performance to lubricants and greases.

TESTS	2.0% NA-LUBE EP-5316	7.5% NA-LUBE EP-5316	10.0% NA-LUBE EP-5316	10.0% NA-LUBE EP-5316 6.0% NA-LUBE AW-6010
<b>Base Oil</b>	<b>Paraffinic ISO VG 32</b>	<b>Paraffinic ISO VG 32</b>	<b>Paraffinic ISO VG 32</b>	<b>Paraffinic ISO VG 32</b>
<b>Four Ball Weld Load</b> (ASTM D 2783) 10 seconds, 25°C, 1800 rpm OK Load (kg) Weld Load (kg)	<b>160 200</b>	<b>280 320</b>	<b>280 320</b>	<b>280 320</b>
<b>Four Ball Wear</b> (ASTM D 4172) 1 hour, 75°C, 40 kg, 1200 rpm Scar Diameter (mm)	<b>0.53</b>	<b>0.80</b>	<b>0.80</b>	<b>0.50</b>
<b>Falex PIN &amp; VEE</b> (ASTM D 3233) lbs	<b>1750</b>	<b>1650</b>	<b>1750</b>	<b>1070</b>
<b>Copper Corrosion</b> (ASTM D 130, DIN 51 759) 3 hours, 100°C 24 hours, 100°C	<b>3a 4b</b>	<b>1b 2e</b>	<b>1b 3b</b>	<b>1b 3b</b>
<b>Demulsibility</b> (ASTM D 1401, DIN 51 599) Oil-Water-Emulsion Time (minutes)	<b>41-39-0 10</b>	<b>40-40-0 10</b>	<b>40-40-0 15</b>	<b>40-40-0 10</b>
<b>Solubility</b> 1 <sup>st</sup> Week 2 <sup>nd</sup> Week	<b>Clear Clear</b>	<b>Clear Clear</b>	<b>Clear Clear</b>	<b>Clear Clear</b>

The results shown reflect data generated by King Industries' Technical Service Laboratory. Actual results may vary depending on the additive package, base oil, and test equipment design.

As shown, with increasing concentration of **NA-LUBE EP-5316**, the wear and extreme pressure properties improve with no negative effects on copper corrosion or demulsibility. Further improvement in the antiwear properties can be obtained when **NA-LUBE EP-5316** is used in combination with an amine-phosphate type antiwear additive, such as NA-LUBE AW-6010.

(see reverse side)

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