<table>
<thead>
<tr>
<th>Viscosity Modifiers</th>
<th>Shear Stability Index (PSSI ASTM D6278)</th>
<th>Thickening Efficiency in ISO 32, cSt @ 100°C</th>
<th>Typical Viscosity cSt @ 100°C</th>
<th>Treat Level wt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-158F Liquid OCP viscosity modifier in paraffinic oil. V-158F for temp naphthenic version.</td>
<td>45 10% = 12.5</td>
<td>1,600</td>
<td>5 – 10</td>
<td></td>
</tr>
<tr>
<td>V-113 Bale form OCP viscosity modifier. 6.6 wt% = 1000 cSt @ 100°C</td>
<td>50 1% = 14.6</td>
<td>Bale</td>
<td>0.5 – 2.0</td>
<td></td>
</tr>
<tr>
<td>V-201 Pellet form OCP viscosity modifier. 5.4 wt% = 1000 cSt @ 100°C</td>
<td>60 1% = 21.0</td>
<td>Pellet</td>
<td>0.5 – 2.0</td>
<td></td>
</tr>
<tr>
<td>V-255 Pellet form shear stable OCP viscosity modifier, 12% = 1000 cSt @ 100°C</td>
<td>25 1% = 10.5</td>
<td>Pellet</td>
<td>0.5 – 2.0</td>
<td></td>
</tr>
<tr>
<td>V-460 Liquid shear stable OCP viscosity modifier, HX-1 approved.</td>
<td>20 10% = 13.6</td>
<td>3,000</td>
<td>5 – 10</td>
<td></td>
</tr>
<tr>
<td>V-508F Liquid viscosity modifier for vegetable oil, esters. Most concentrated and versatile option.</td>
<td>28 10% = 22.9</td>
<td>7,000</td>
<td>5 – 15</td>
<td></td>
</tr>
<tr>
<td>V-521 Liquid viscosity modifier for vegetable oil, esters. Exceptional low temperature fluidity.</td>
<td>30 10% = 16.4</td>
<td>5,000</td>
<td>5 – 15</td>
<td></td>
</tr>
<tr>
<td>V-515 Liquid viscosity modifier for vegetable oil and PAO/ester blends. Slight tack.</td>
<td>50 10% = 12.0</td>
<td>8,000</td>
<td>5 – 15</td>
<td></td>
</tr>
<tr>
<td>MH-2000 Liquid PMA VII with exceptional shear stability for hydraulic fluid (KRL shear loss = 35%)</td>
<td>1 10% = 9.2</td>
<td>1,100</td>
<td>5 – 20</td>
<td></td>
</tr>
<tr>
<td>MG-3000 Liquid PMA VII with exceptional shear stability for gear oils (KRL shear loss = 20%)</td>
<td>0 10% = 8.6</td>
<td>550</td>
<td>10 – 40</td>
<td></td>
</tr>
<tr>
<td>MN-3500 Liquid PMA VII in naphthenic oil for extreme low temperature applications.</td>
<td>9 10% = 12.0</td>
<td>900</td>
<td>5 – 20</td>
<td></td>
</tr>
<tr>
<td>MD-8000 Liquid dispersant PMA for improved varnish/sludge control in tractor HF and ATF.</td>
<td>40 10% = 16.0</td>
<td>2,000</td>
<td>1 – 5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grease Additives</th>
<th>Treat Level wt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-207 Powder polymer for quick dissolving in cooling oil. Superior shear stability and water spray-off for most greases. V-211 for HX-1.</td>
<td>0.5 – 2.0</td>
</tr>
<tr>
<td>V-4020 Pellet polymer to reduce water spray off in grease at low treat. V-4004A for convenient liquid form and V-4033 for extra concentrated liquid.</td>
<td>0.2 – 1.0</td>
</tr>
<tr>
<td>V-191 Polymer emulsion stable against water during and after production. Improved water spray-off and tack in organic and synthetic greases.</td>
<td>0.5 – 2.0</td>
</tr>
<tr>
<td>V-4051 Liquid polymer concentrate in bio-based ester to improve shear stability and water spray-off. Easily handled. Ecolabel / LuSC / VGP status.</td>
<td>0.5 – 2.0</td>
</tr>
<tr>
<td>V-4064 Flake polymer to improve oil bleed in low polarity HX-1 greases.</td>
<td>0.5 – 2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialty Packages &amp; Additives</th>
<th>Treat Level wt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI-426 Corrosion inhibitor and anti-wear additive for HX-1. CI-427 for low color and wide read-across. For additional extreme pressure, CI-426EP.</td>
<td>0.5 – 2.0</td>
</tr>
<tr>
<td>GA-614 Multifunctional industrial gear oil package. Variable treat rate. &gt;60 lb. Timken, 12+ FZG, up to 620 kgf EP. Meets US Steel 224, DIN 51517 Part 3</td>
<td>1.5 – 5.0</td>
</tr>
<tr>
<td>HF-595 Biobased hydraulic fluid package for Ecolabel and EAL hydraulics. Compatible in a variety of eco-friendly base fluids and mineral oils.</td>
<td>2.2</td>
</tr>
<tr>
<td>RD-540 Biobased rock drill, air tool, and open gear package. &gt;70 lb. Timken and 315 kgf EP weld. Emulsifying, RD-540CP for demulsifying.</td>
<td>2.2</td>
</tr>
<tr>
<td>WA-64 Light color, low odor, compatible in a range of base oils. Cincinnati Fives stick-slip test.</td>
<td>1.75</td>
</tr>
<tr>
<td>V-162 Anti-mist additive for oil based coolants. Use MW-612 for aqueous or synthetic fluids.</td>
<td>0.02 – 0.1</td>
</tr>
<tr>
<td>WA-60SF Light color, low odor sulfur-free way oil package. Passes Cincinnati Fives stick-slip test. Adds no color to allow water-white way oils.</td>
<td>1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cold Flow Improvers</th>
<th>Treat Level wt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD-585 Concentrated cold flow improver for vegetable oils. Doubles as shear stable VI improver for Ecolabel formulations (1800 cSt @ 100°C, 7 PSSI).</td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>PD-590 Readily biodegradable cold flow improver, meets LuSC Ecolabel and EPA Safer Choice certifications. No known carcinogens.</td>
<td>0.1 – 1.0</td>
</tr>
<tr>
<td>PD-610 Mineral oil pour point depressant for Gr. I/II base oils. PD-620 for lighter Gr. I/II oils. PD-630 for Gr. III oils.</td>
<td>0.1 – 0.5</td>
</tr>
</tbody>
</table>
Purchasing Information

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