Monolec® Drive Train Fluid (7511, 7531, 7551)

Heavy-Duty Formula Improves Equipment Performance

Monolec® Drive Train Fluid (7511, 7531, 7551) is a high-performance, heavy-duty drive train fluid that protects off-road equipment and keeps it operating at maximum performance whether it is running intermittently or continuously. It works with today’s newer transmission designs and can be used in final drives, wet brakes and various torque convertors. It improves power throughput density, which helps eliminate brake chatter and clutch wear, as well as reduce mechanical shudder. Ideal for use in construction, mining, quarries, hydraulic fracturing and other applications where downtime can be costly, this versatile fluid meets or exceeds the performance requirements of Caterpillar, Allison and Komatsu.

This is not an engine oil formulated to be a drive train fluid; Monolec Drive Train Fluid was specifically developed to meet the rigorous demands of the application. Its carefully selected additive system – which includes Monolec®, LE’s exclusive wear-reducing additive – balances the need for lubricity along with the frictional properties needed to optimize the operation of powershift clutches and wet brakes. The fluid’s heat-resistant formulation helps it stay cool during operation – even in extreme temperatures – with no need for seasonal changeouts.

Beneficial Qualities

Versatile & Long-Lasting
• Prolongs equipment & fluid life, even under high heat conditions
• Provides exceptional resistance to moisture
• Protects metal from rust, oxidation and corrosion
• Keeps deposits under control, improving cleanliness

Wear-Reducing
• Decreases operating temperatures
• Improves frictional performance due to exceptional anti-wear and load-carrying (EP) properties
• Protects gears and clutch, reducing maintenance costs

Nonfoaming
• Prevents foaming
• Reduces pump cavitation
• Reduces lubricant leakage
• Eliminates hydraulic fade

Proprietary Additive

LE’s proprietary additives are used exclusively in LE lubricants. Monolec Drive Train Fluid contains Monolec.

Monolec® wear-reducing additive creates a single molecular lubricating film on metal surfaces, vastly increasing oil film strength without affecting clearances. An invaluable component in LE’s engine oils, industrial oils and many of its other lubricants, Monolec allows opposing surfaces to slide by one another, greatly reducing friction, heat and wear.
**Monolec® Drive Train Fluid**

<table>
<thead>
<tr>
<th>Color</th>
<th>7511</th>
<th>7531</th>
<th>7551</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAE Grade</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Relative Density @ 60°C/60°F, ASTM D1298</td>
<td>0.8713</td>
<td>0.8805</td>
<td>0.8883</td>
</tr>
<tr>
<td>Viscosity @ 100°C, cSt, ASTM D445</td>
<td>6.14</td>
<td>11.44</td>
<td>19.05</td>
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<tr>
<td>Viscosity @ 40°C, cSt, ASTM D445</td>
<td>38.78</td>
<td>99.52</td>
<td>222.74</td>
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<tr>
<td>Viscosity Index ASTM D2270</td>
<td>103</td>
<td>101</td>
<td>96</td>
</tr>
<tr>
<td>Flash Point °C (°F), (COC), ASTM D92</td>
<td>227 (440)</td>
<td>260 (500)</td>
<td>263 (505)</td>
</tr>
<tr>
<td>Pour Point °C (°F), ASTM D97</td>
<td>-30 (-22)</td>
<td>-30 (-22)</td>
<td>-12 (10)</td>
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<tr>
<td>Rust Test 4 hrs @ 60°C, DI H2O, ASTM D665A</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
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<tr>
<td>Copper Corrosion 3 hrs @ 100°C, ASTM D130</td>
<td>1b</td>
<td>1b</td>
<td>1b</td>
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<tr>
<td>Base Number ASTM D4739</td>
<td>7.45</td>
<td>7.45</td>
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<tr>
<td>Foaming Characteristics @ 24°C/93.5°C/24°C, 3 sequences, ml of foam/time to break, ASTM D892</td>
<td>0/0, 10/0, 0/0</td>
<td>0/0, 10/0, 0/0</td>
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</tbody>
</table>

**Performance Requirements Met or Exceeded**
- Allison TES 439 (7531 only)
- C4 (obsolete)
- Cat TO-4, Cat TO-2
- Dana Powershift
- Eaton (formerly Vickers) M-2950-S
- Eaton Fuller
- Euclid
- Komatsu Equipment KES 07.868.1
- Tremac/TTC

**Typical Applications**
- Heavy-duty transmissions
- Combination transmission-hydraulic (wet brake systems)
- Hydraulic systems
- Power steering and power takeoff
- Sump systems that require tractor hydraulic fluids