



## Duolec® PAG Gear Lubricant (9705-9707)

### *PAG Gear Oil Provides Ultimate Wear Protection, Corrosion Resistance and Thermal Stability*

LE's Duolec® PAG Gear Lubricant (9705-9707) is a PAG gear oil that has been specially formulated for the ultimate in corrosion resistance, wear protection and thermal stability. Polyalkylene glycol (PAG) lubricants are synthetic formulations known for their high viscosity index, extreme pressure (EP) properties, and ability to handle temperature extremes. In addition to the PAG base fluid, this formulation features Duolec®, LE's proprietary dual-acting additive that provides both wear-reducing and EP protection.

Duolec PAG Gear Lubricant is an excellent choice for lubricating a variety of bearings and gears – particularly worm gears – as well as other equipment operating under extreme conditions.

#### **Beneficial Qualities**

##### ***Provides Excellent Protection in Extreme Conditions***

- Formulated with a polyalkylene glycol (PAG) synthetic base fluid
- Features high VI and EP properties
- Remains thermally stable and offers low volatility
- Is good for wide operating temperature range

##### ***Protects Against Rust, Corrosion and Sludge***

- Offers superior oxidation resistance
- Provides excellent corrosion prevention
- Is highly resistant to sludge formation
- Can be used in high water contamination applications

##### ***Protects Against Micropitting***

- Is ideal for worm gear applications

#### **Proprietary Additive**

LE's proprietary additives are used exclusively in LE lubricants. Duolec® PAG Gear Lubricant contains Duolec.

**Duolec®** dual-acting additive imparts synergistic properties to lubricants, providing both wear-reducing and extreme pressure protection. The result of revolutionary technology designed specifically for use in LE gear lubricants, Duolec increases oil film strength and is temperature-activated to provide a protective layer that smooths metal surfaces and minimizes the effects of any contact, thereby reducing friction and preventing surface wear.





## Duolec® PAG Gear Lubricant

	<u>9705</u>	<u>9706</u>	<u>9707</u>
<b>Color</b>	Straw	Straw	Straw
<b>ISO VG</b>	220	320	460
<b>Relative Density @ 60°F/60°F, ASTM D1298</b>	1.008	1.008	1.008
<b>Viscosity @ 100°C, cSt, ASTM D445</b>	41.9	61.6	83.0
<b>Viscosity @ 40°C, cSt, ASTM D445</b>	227	339	477
<b>Viscosity Index ASTM D2270</b>	242	252	262
<b>Flash Point °C (°F) (COC), ASTM D92</b>	275 (527)	275 (527)	275 (527)
<b>Pour Point °C (°F), ASTM D97</b>	-39 (-38)	-42 (-44)	-30 (-22)
<b>Oxidation 312 hrs @ 95°C, ASTM D2893A - Modified Change in Viscosity @ 40°C, cSt, %</b>	+0.09	+0.09	+0.09
<b>Timken OK Load lbs, ASTM D2782</b>	75	75	75
<b>Four-Ball Wear @ 75°C, 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D4172</b>	0.33	0.33	0.33
<b>Foaming Characteristics @ 24°C/93.5°C/24°C, 3 sequences, ml of foam/time to break, ASTM D892</b>	20/0;0/0;0/0	20/0;0/0;0/0	20/0;0/0;0/0
<b>FE-8 Roller Bearing Roller/Cage, mg</b>	3/7	3/7	3/7
<b>FZG Micropitting @90°/60°C, Load Stage</b>	10	10	10
<b>FZG Test Load Stage ASTM D5182</b>	>12	>12	>12
<b>Paint Compatibility with P22-8050 Anthracite Brown</b>	Pass	Pass	Pass

### Performance Requirements Met or Exceeded

- David Brown Type G
- DIN 51517 Part 3
- FAG
- Flender
- Hansen
- Rexroth Bosch Group
- SKF
- USDA H2

- Textile machines
- Sliding bearings
- Chains and conveyors
- Kiln and oven bearings
- Roller and pellet mills
- Extruders

### Recommendations

- Do not mix PAG-based lubricants with any mineral oil or PAO-based lubricating product as they are often insoluble and will form a gelatinous material when mixed. Refer to LE's PAG Flush Procedure when performing a changeover from one of these products to Duolec PAG Gear Lubricant.

- PAG-based lubricants can sometimes soften industrial paints, so internal gearbox surfaces should be unpainted or coated with a resistant material.
- Seal and gasket materials that are compatible with PAG-based lubricants include fluorosilicone, nitrile, vinyl-methyl polysiloxane, and Viton® fluoroelastomer. Materials that are incompatible with PAG-based lubricants include polyurethane-based elastomers, leather, cork, asbestos and paper.

### Typical Applications

- Enclosed gear applications, including helical, bevel, planetary, and especially worm gears