

Product Information



H1 Quinplex Syn FG Gear Oil

(4150, 4220, 4320, 4460)

Synthetic Food Grade Oil Protects Gears in Extreme High and Low Temperatures

Recommended for a variety of gearboxes and other critical applications in food and beverage manufacturing facilities, H1 Quinplex® Syn FG Gear Oil (4150-4460) is NSF H1 registered for incidental food contact and was formulated to withstand severe loading conditions and prevent rust and corrosion. H1 Quinplex Syn FG Gear Oil contains 100 percent synthetic base stock to provide superior protection in extreme high and low temperatures. It also offers great seal compatibility and excellent nonfoaming qualities. Its anti-wear capability differentiates it from many other white oils on the market. To ensure good metal adhesion, it contains a shear stable polymeric tackifier system including Quinplex®, LE's proprietary impact-resistant additive. H1 Quinplex Syn FG Gear Oil helps factories avoid unplanned downtime and expensive repairs by providing long-lasting, reliable protection that keeps critical equipment running in extreme temperatures.



Beneficial Qualities

Food Grade

- Registered NSF H1 for incidental food contact
- Certified Kosher Pareve
- Certified Halal by IFANCA
- Is non-staining, low-odor, and translucent

100% Synthetic Base Oil

- Protects from extreme high & low temperatures
- Stays in viscosity
- Has low pour point

Protection

- Includes superior anti-wear additive package
- Prevents rust and corrosion
- Readily separates from water; excellent demulsibility

Reliability

- Has excellent load-carrying capability
- Is compatible with seals
- Has nonfoaming characteristics
- Is tacky and clings to metal surfaces

Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. H1 Quinplex Syn FG Gear Oil contains **Quinplex®**, which contributes to outstanding water resistance and tackiness. It helps to form a barrier against corrosion.





H1 Quinplex Syn FG Gear Oil

	<u>4150</u>	<u>4220</u>	<u>4320</u>	<u>4460</u>
Color	Amber	Amber	Amber	Amber
ISO VG	150	220	320	460
AGMA Grade	4 EP	5 EP	6 EP	7 EP
Relative Density @ 60°F/60°F, ASTM D1298	0.855	0.856	0.863	0.858
Viscosity @ 100°C, cSt, ASTM D445	20.27	27.12	36.12	48.64
Viscosity @ 40°C, cSt, ASTM D445	161.3	238.2	341.1	488.2
Viscosity Index ASTM D2270	146	147	152	156
Flash Point °C (°F) (COC), ASTM D92	>240 (>464)	>240 (>464)	>240 (>464)	>240 (>464)
Pour Point °C (°F), ASTM D97	-36 (-33)	-33 (-27)	-30 (-22)	-30 (-22)
Rust Test 4 hrs @ 60°C, Sea H2O, ASTM D665B	Pass	Pass	Pass	Pass
Copper Corrosion 3 hrs @ 100°C, ASTM D130	1b	1b	1b	1b
Copper Corrosion 3 hrs @ 121°C, ASTM D130	1b	1b	1b	1b
FZG Fail Stage, DIN ISO 51354	>12	>12	>12	>12
Four-Ball Wear @ 75°C, 1200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D4172	0.30	0.30	0.30	0.30
Emulsion Characteristics @ 82°C, oil-water-emulsion/minutes, ASTM D1401	40-40-0/10	40-40-0/10	40-40-0/10	40-40-0/10
Foaming Characteristics @ 24°C/93.5°C/24°C, 3 sequences, ml of foam/time to break, ASTM D892	0/0; 0/0; 0/0	0/0; 0/0; 0/0	0/0; 0/0; 0/0	0/0; 0/0; 0/0

Available Grades

- 150 ISO / 4 EP (4150)
- 220 ISO / 5 EP (4220)
- 320 ISO / 6 EP (4320)
- 460 ISO / 7 EP (4460)

4220 only:

- Angelus Sanitary Can Machine
- Lanham-Proofer Chain

Performance Requirements Met or Exceeded

All grades:

- ANSI/AGMA 9005-D94 S
- ANSI/AGMA 9005-E02 EP
- Halal (certified by IFANCA)
- Kosher Pareve
- NSF H1

Typical Applications

- Equipment where incidental food contact may occur, including:
 - o Bearings
 - o Gearboxes
 - o Open gears
 - o Slides, guides, chains, conveyor chains
 - o Valves