



Monolec® Hydraulic Oil (multigrade) (6520)

Extended-Life Oil Provides Smooth Hydraulic Power

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A long-lasting, anti-foaming oil designed to protect the life of high-speed hydraulic pumps and motors, Monolec® Hydraulic Oil offers superior protection against water contamination, rust, corrosion and oxidation. This multigrade formulation outperforms other commercial hydraulic oils in thermal, oxidative and hydrolytic stability. It is recommended for hydraulic applications with operating temperatures that fluctuate widely on a daily basis.

Beneficial Qualities

Provides Long-Lasting, Cost-Saving Service

- Maintains long oil service life
- Extends drain intervals
- Reduces oil consumption, including need for make-up oil
- Minimizes labor and downtime required for oil changes
- Outperforms commercial hydraulic oils in thermal, oxidative and hydrolytic stability

Prevents Wear & Extends Equipment Life

- Protects metal components from scuffing, galling and other wear
- Prevents or minimizes leaks by protecting seals and hoses
- Minimizes equipment downtime and failure
- Reduces need for replacement parts and labor

Resists Water Contamination, Rust, Corrosion & Oxidation

- Separates rapidly from water, allowing for easy drain-off
- Prevents rust and corrosion with high film strength and R & O inhibitors
- Provides superior oxidation resistance
 - o Reduces sludge and varnish formation
 - o Prevents plugged orifices and sticky valves
 - o Minimizes viscosity changes during temperature fluctuations
- Provides smooth, uninterrupted power flow
 - o Eliminates fade or chatter by breaking up foam with powerful anti-foaming agent
 - o Maintains system cleanliness with oxidation-resistant formula



Proprietary Additives

LE's proprietary additives are used exclusively in LE lubricants. Monolec Hydraulic Oil 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® Hydraulic Oil (multigrade)

	6520
Color	Red
ISO VG / SAE Grade	32 / 5W-20
Relative Density @ 60°F/60°F, ASTM D1298	0.8676
Viscosity @ 100°C, cSt, ASTM D445	6.2
Viscosity @ 40°C, cSt, ASTM D445	31.3
Viscosity Index ASTM D2270	≥135
Flash Point °C (°F), (COC), ASTM D92	227 (440)
Pour Point °C (°F), ASTM D97	-39 (-38)
Rust Test 4 hrs @ 60°C, DI H₂O, ASTM D665A	pass
Rust Test 4 hrs @ 60°C, Sea H₂O, ASTM D665B	pass
Copper Corrosion 3 hrs @ 100C, ASTM D130	1a
Emulsion Characteristics @ 54°C, oil-water-emulsion/minutes, ASTM D1401	40-40-0/10
Air Release 9.0-90.0 cSt @ 40°C: 50°C, minutes, ASTM D3427	1.84
Dielectric Strength, Kv, ASTM D877	≥40

Performance Requirements Met or Exceeded

- AIST 126, 127
- ANSI/AGMA 9005-E02-RO
- ASTM D6158
- Bosch-Rexroth RD 90220
- Denison (Parker-Hannifin) HF-0
- DIN 51524-3
- Eaton (Vickers) 694 (formerly M-2950-S and I-286-S)
- ISO 11158
- MAG (Cincinnati Milacron, Cincinnati Machine) P68
- SAE MS 1004

Typical Applications

- Hydraulic pumps, motors and systems:
 - o Construction equipment
 - o Well service equipment
 - o Utility service boom trucks
 - o Forklifts
 - o In-plant stations

Recommendation

- This product should not be used for fire-resistant hydraulic fluid applications.