



Wirelife® Monolec® Penetrating Lubricant (2001)

Versatile, Wear-Reducing Oil Preserves Metal to the Core

Wirelife® Monolec® Penetrating Lubricant (2001) has excellent corrosion resistance and high load carrying (EP) properties. It penetrates to the core of wire ropes, whether they are running or stationary. It is also excellent as a penetrating lubricant for chains of all sizes and works well in a variety of other industrial applications. When used in conjunction with Wirelife Almasol® Coating Lubricant, maximum protection and wear reduction is achieved.

It contains a petroleum solvent to enhance its ability to penetrate. The solvent evaporates, leaving behind a film of heavy-bodied lubricant that protects and lubricates each strand and resists leakage from the wire rope core.

Beneficial Qualities

Superior Penetration

- Penetrates to the core of wire rope and to the pin and bushing area of chains
- Provides long-lasting lubrication of inner strands of wire rope

High Load-Carrying Capacity & Friction Reduction

- Contains extreme pressure (EP) additives
- Works well for heavily loaded standing or running wire ropes
- Resists fretting wear, a major cause of wire rope failures
- Provides wear-reducing protection between strands and over sheaves or drums
- Allows strands to slide against each other with greatly reduced friction, wear and heat

Rust & Corrosion Protection

- Performs extremely well in marine environments

- Resists water washout
- Provides outstanding rust protection and is an excellent metal preservative for all types of equipment

Versatility

- Works well with wire rope, cables and chains, as well as in many other applications requiring a penetrating lubricant
- Meets USDA H2 criteria for nonfood contact areas of food processing

Easy Application

- Can be dipped, sprayed on with automatic equipment or hand-applied with a brush
- Is also available in aerosol cans, which contain no chlorofluorocarbons



Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. Wirelife Monolec Penetrating Lubricant contains Monolec.

Monolec® wear-reducing additive has proven its extraordinary performance in thousands of applications. An invaluable component in LE's engine oils, industrial oils and many of its other lubricants, Monolec creates a single molecular lubricating film on metal surfaces, vastly increasing film strength without affecting tolerances. It allows opposing surfaces to slide by one another, greatly reducing friction, heat and wear.



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	<u>2001</u>
Color	Purple
Viscosity @ 100°C (212°F), cSt, ASTM D445	13.60
Viscosity @ 40°C (104°F), cSt, ASTM D445	189.0
Viscosity @ 40°C (104°F) as applied, cSt	40.00
Flash Point °C (°F) as applied	93 (195)
Pour Point °C (°F) as applied	-18 (0)
Rust Test 4 hrs @ 60°C (140°F), DI H₂O, ASTM D665A	Pass
Rust Test 4 hrs @ 60°C (140°F), Sea H₂O, ASTM D665B	Pass
Timken OK Load lbs, ASTM D2782	60
Four-Ball EP Weld Point kgf, ASTM D2783	400
Four-Ball EP Load Wear Index kgf, ASTM D2783	53.1
Four-Ball Wear @ 75°C (167°F), 1,200 rpm, 15 kgf, 60 minutes, mm wear, ASTM D4172	0.42
Four-Ball Wear @ 75°C (167°F), 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D4172	0.59
Falex Pin & Vee Block EP lbf, ASTM D3233	3750+
Humidity Cabinet days, ASTM D1748	60+
Salt Spray hrs, ASTM B117	62
Immersion Test days, 5% saltwater	30+

Performance Requirements Met or Exceeded

- USDA H2

Typical Applications

- All stationary or moving wire ropes or cables under heavy loads
- Chains of all sizes
- Mining and construction
 - Standing and running lines
 - Draglines, cranes and derricks
- Marine environment
 - Cranes, hoists and drilling rigs
- Any other application that requires excellent rust protection for steel parts

Caution

Contains a combustible petroleum solvent

- Use with adequate ventilation
- Keep containers tightly closed when not in use
- Consult MSDS for further information



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