



## 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 wear index. 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**

- 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

- 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.



## Wirelife™ Monolec® Penetrating Lubricant

	<u>2001</u>
<b>Color</b>	Purple
<b>Viscosity @ 100°C (212°F), cSt, ASTM D445</b>	13.60
<b>Viscosity @ 40°C (104°F), cSt, ASTM D445</b>	189.0
<b>Viscosity @ 40°C (104°F) as applied, cSt</b>	40.00
<b>Flash Point °C (°F) as applied</b>	93 (195)
<b>Pour Point °C (°F) as applied</b>	-18 (0)
<b>Rust Test 4 hrs @ 60°C (140°F), DI H<sub>2</sub>O, ASTM D665A</b>	Pass
<b>Rust Test 4 hrs @ 60°C (140°F), Sea H<sub>2</sub>O, ASTM D665B</b>	Pass
<b>Timken OK Load lbs, ASTM D2782</b>	60
<b>Four-Ball EP Weld Point kgf, ASTM D2783</b>	400
<b>Four-Ball EP Load Wear Index kgf, ASTM D2783</b>	53.1
<b>Four-Ball Wear @ 75°C (167°F), 1,200 rpm, 15 kgf, 60 minutes, mm wear, ASTM D4172</b>	0.42
<b>Four-Ball Wear @ 75°C (167°F), 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D4172</b>	0.59
<b>Falex Pin &amp; Vee Block EP lbf, ASTM D3233</b>	3750+
<b>Humidity Cabinet days, ASTM D1748</b>	60+
<b>Salt Spray hrs, ASTM B117</b>	62
<b>Immersion Test days, 5% saltwater</b>	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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