Lube Control Pty Ltd

Product Information

Monolec® Multiplex Lubricant (4622)

High-Quality Grease Offers Versatile EP Performance

Monolec® Multiplex Lubricant (4622) is a highly versatile, long-life, lithium-complex-thickened grease designed for extreme pressure performance and extended relubrication intervals in

contains Monolec®, LE's proprietary wear-reducing additive, and provides dependable performance in a broad operating temperature range in critical grease points including chassis and wheel bearings. Its versatility makes it possible to consolidate the number of greases used, especially helpful aboard a marine vessel.

Beneficial Qualities

Demonstrates Excellent Versatility

- Works in wide variety of industrial, marine, farm and fleet applications
- Protects both plain and anti-friction bearings
- Meets requirements of NLGI GC-LB grease specification

Withstands Pressure & Reduces Wear

- Demonstrates superior EP characteristics
  - Has a Timken OK Load of 27.2 kg (60 lb)
- Provides exceptional film strength and protects against wear
- Protects against corrosion, rust and oxidation
- Exhibits long-lasting mechanical stability
  - Results in minimal change in consistency even after repetitive shear

Takes the Heat & the Cold

- Performs well in a broad temperature range
- Demonstrates excellent pumpability for cold weather applications
- Resists high temperatures and protects equipment in elevated temperature applications
- Exhibits high dropping point

Available Grades

- NLGI 2

Proprietary Additives

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

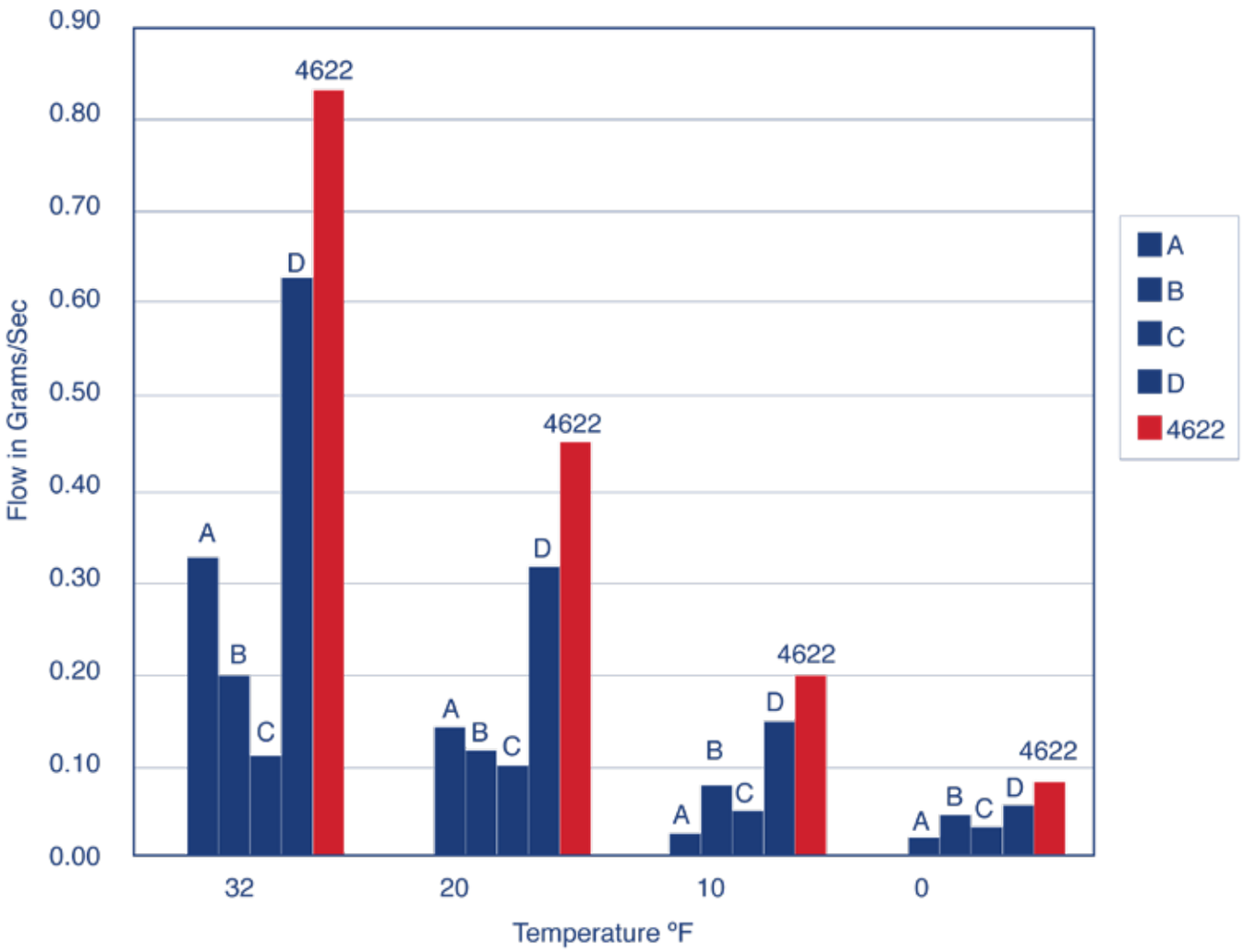
Monolec® wear-reducing additive creates a single molecular lubricating film on metal surfaces, vastly increasing oil film strength without affecting clearances. An invaluable component in LE's engine oils, industrial oils and many of its other lubricants, Monolec allows opposing surfaces to slide by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

Asset Reliability Solutions™

Monolec® Multiplex Lubricant

Demonstrates Excellent Low-Temp Pumpability in US Steel Grease Mobility Test

The US Steel Grease Mobility Test measures the resistance of grease flow at prescribed temperature and pressure, thereby predicting pumpability characteristics of lubricants under low-temperature operating conditions.



The sample is placed in the pressure cylinder and cold soaked to the prescribed temperature. The flow of grease is started under the selected pressure (usually 150 psi). After the initial flow, sufficient grease is collected to calculate the flow rate in grams of grease per second during a measured amount of time. The higher the flow rate in grams per second, the better the predicted pumpability of the grease.

1919 E. Tulsa • Wichita, KS 67216 • Fax: 800-228-1142
LE operates under an ISO 9001 Certified Quality System.

Technical Data

Monolec® Multiplex Lubricant

Performance Requirements Met or Exceeded

- ASTM D4950
- NLGI GC-LB
- SAE J-310

Typical Applications

- Industrial and marine: Conveyors, electric motors, fans
- Marine: Bearings, mooring and anchor winches, hose-handling and provision cranes
- Farm and fleet: Debarkers, ditching machines, dump trucks, forklifts, front-end loaders, vehicle fleets

	4622
Thickener Type	Lithium-Complex
Texture	Smooth
Color	Red
NLGI Grade	2
Worked 60 Penetration ASTM D217	275
Worked 10K Penetration ASTM D217	+22, +7.9%
Worked 100K Penetration ASTM D217	+43, +15.5%
Dropping Point °C (°F), ASTM D2265	266 (510)
Base Fluid Characteristics	
Viscosity @ 100°C, cSt, ASTM D445	12.00
Viscosity @ 40°C, cSt, ASTM D445	129.4
Corrosion Prevention DI H2O, ASTM D1743	Pass
Oil Separation 24 hrs @ 25°C, 1.75 kPa (0.25 psi), % Bleed, ASTM D1742	3.1
Timken OK Load lbs, ASTM D2509	60
Four-Ball EP Weld Point kgf, ASTM D2596	400
Four-Ball EP Load Wear Index kgf, ASTM D2596	59
Four-Ball Wear @ 75°C, 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D2266	0.59
Fretting Wear Protection mg loss, ASTM D4170	7
Low Temp Torque NM, ASTM D4693	14.5
Water Washout % Loss @ 80ºC, ASTM D1264	12
High Temperature Life hrs, ASTM D3527	100.3
Leakage Tendencies g, ASTM D4290	6
Elastomer Compatibility ASTM D4289	
CR Elastomer	
Volume Change	Pass
Hardness Change	Pass
NBR-L Elastomer	
Volume Change	Pass
Hardness Change	Pass

Monolec® is a registered trademark of Lubrication Engineers, Inc.

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