



Almamoly™ HD Grease (1488)

Solid Lubricant Grease with Calcium Sulfonate Thickener Provides Lasting Protection for Heavy Mobile Equipment

Lubrication Engineers, Inc. formulated its solid lubricant-containing, calcium sulfonate-thickened Almamoly™ HD Grease for use in severe conditions such as high temperatures, heavy loads and water. This high-performance grease is intended for long-lasting use in heavy-duty mobile equipment such as that used in construction, agriculture, open pit mining and road-building.

Almamoly HD Grease contains Almasol®, LE's proprietary solid additive as well as 5 percent molybdenum disulfide (also known as molydisulfide or moly). Compared to other solid lubricant-containing greases that rely on moly or graphite alone, Almamoly HD Grease's synergistic combination of moly and Almasol gives it better wear resistance. This unique combination of solids helps ensure reliable lubrication, staying in place even when the lubricant is squeezed out of the contact zone due to extreme pressure (EP) or heavy shock loading. The calcium sulfonate thickener provides additional performance features that make this grease desirable for a variety of extreme conditions.



Beneficial Qualities

Solid additive combination

- Contains proprietary combination of Almasol and 5% moly
- Provides better wear-resistance than other greases containing solid lubricants, including those containing 5% moly alone
- Meets requirements of major OEMs

Calcium sulfonate thickener

- Inherently prevents rust & corrosion, in contrast to other thickeners
- Has very high dropping point
- Exhibits excellent mechanical stability
- Imparts outstanding EP properties, providing wear protection even when pound-out conditions occur

Reliable, long-lasting formula

- Has very low oil separation
- Stays in place for extended lubrication intervals

Available Grades

- NLGI I



Proprietary Additives

LE's proprietary additives are used exclusively in LE lubricants. Almamoly™ HD Grease contains Almasol.

Almasol® solid wear-reducing additive is able to withstand extremely heavy loads, chemical attack and temperatures up to 1,900°F (1,038°C). It is attracted to metal surfaces, forming a microscopic layer but not building on itself or affecting clearances. Almasol minimizes metal-to-metal contact and the resulting friction, heat and wear.



Almamoly™ HD Grease

	1488
Thickener Type	Calcium Sulfonate
Texture	Smooth
Color	Gray
NLGI Grade	1
Worked 60 Penetration ASTM D217	329
Worked 10K Penetration ASTM D217	327 (-2, -0.61%)
Worked 100K Penetration ASTM D217	331 (+2, +0.61%)
Dropping Point °C (°F), ASTM D2265	≥316 (≥600)
Base Fluid Characteristics	
Flash Point °C (°F), ASTM D92	260 (500)
Viscosity @ 100°C, cSt, ASTM D445	14.39
Viscosity @ 40°C, cSt, ASTM D445	143.5
Viscosity Index ASTM D2270	98
Oxidation drop in psi @ 100 hrs, ASTM D942	5
Oxidation drop in psi @ 500 hrs, ASTM D942	10
Corrosion Prevention DI H₂O, ASTM D1743	Pass
Oil Separation 30 hrs @ 100°C, % bleed, ASTM D6184	<1.00
Timken OK Load lbs, ASTM D2509	60
Four-Ball EP Weld Point kgf, ASTM D2596	620
Four-Ball EP Load Wear Index kgf, ASTM D2596	102.2
Four-Ball Wear @ 75°C, 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D2266	0.45
Copper Corrosion 24 hrs @ 100°C, ASTM D4048	1b
Evaporation 22 hrs @ 100°C, % loss, ASTM D972	<0.75

Performance Requirements Met or Exceeded

- Can be used for equipment that requires or specifies greases containing solid lubricants
- Can be used for heavy-duty mobile equipment requiring 5% moly grease, including Caterpillar®, Hyundai®, John Deere® and Komatsu®

Recommendations

- Can be used with automatic single-point lubricators and centralized lubrication systems

Typical Applications

- Large mobile equipment used for agriculture, construction, open pit mining and road-building, including articulated trucks, backhoes, bulldozers, conveyors, crushers, excavators, loaders and shovels.

- Swiveling and pivoting parts including articulated joints, bucket pins, sleeve bearings, pivot bearings, hinge pins, latches, locks, spindles, threaded parts, cams, and slides.
- Other applications such as continuous casters, motor-operated steam valves, and underwater applications.



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