

Product Information



Almasol® Dry Film Lubricant (9200)

Spray Lubricant Ensures Long-Lasting Lubrication in Tough Conditions & Broad Temperature Range

Almasol® Dry Film Lubricant (9200) is a solid film spray lubricant designed for use where permanent lubrication with exceptional long wear life and low frictional properties is desired, and oil and grease cannot be used. For use in a wide temperature range, it combines superior dry film lubrication with safe and easy spray application.

Almasol Dry Film Lubricant provides dependable, long-lasting lubrication in extreme environments where conventional lubricants would be inadequate. It contains a carefully selected blend of Almasol and other solid lubricants of controlled particle size, dispersed in a fast-drying solvent system and resin binder. The resulting film has excellent adhesion.



Spraying Almasol 9200 on the aluminum hinge pins of these folding ramps allowed this LE customer to prevent galling caused by metal-on-metal rubbing.

Beneficial Qualities

Wear & Friction

- Effectively lubricates surfaces where friction is a problem, such as gears, actuators, cams, hinges, pins, shafts, tracks, threaded parts, frictional bearings, pistons, cylinders, valves and latches
- Prevents galling, seizing and fretting for splines, threaded connections and disconnects
- Protects mating metal surfaces under operating conditions of high loads and slow speeds
- Eliminates scoring by reducing the force required when disassembling parts for press fitting

Versatile & Long-Lasting

- Performs in a variety of conditions:
 - Broad temperature range: -73 to 343°C (-100 to 650°F)
 - Dusty and abrasive environments
 - Freshwater and saltwater
- Lasts two to five times longer than conventional dry film lubricants
- Possesses excellent EP properties, cannot be squeezed out up to 100,000 psi
- Lubricates effectively even after long periods of non-use

Fast, Easy & Economical

- Cures completely in two to four hours at room temperature
- Comes in convenient, easy-to-use spray can that contains no fluorocarbons
- Provides sufficient lubrication with a thin film; a small amount goes a long way

Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. Almasol® Dry Film Lubricant 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.





Almasol® Dry Film Lubricant

Typical Applications

- Cams, Slides
- Chains
- Hinge Pins, Latches, Locks
- Metering Valves
- Sleeve & Pivot Bearings
- Spindles
- Threaded Parts

Recommendations

- Use with adequate ventilation; contains flammable solvents
- Store below 49°C (120°F)
- Do not store near heat, sparks or flame

9200

Color	Gray/Black
Flash Point °C (°F), (COC), ASTM D92	-20 (-4)
Coverage per Can	2.8 sq m (30 sq ft)
Recommended Coating Thickness (cured)	.005 to .01 mm (.0002 to .0005 in)
Cure Time (air dry)	30 minutes to handle, 2 to 4 hours to use
Operating Temperature Range	-73 to 343°C (-100 to 650°F) [Up to 537°C (1,000°F) in absence of oxygen]
Shelf Life	12 months @ 20 to 26°C (68 to 78°F)

Test for Bonded Solid Film Lubricant Coatings

Lubricant	Initial Coefficient of Friction	Wear Life Revolutions
Competitor A	.059	90,000
Competitor B	.080	200,000
Competitor C	.080	200,000
Competitor D	.077	250,000
Almasol 9200	.070	500,000

The results of the test confirmed that Almasol 9200 lasts anywhere from two to five times longer than competitors' dry film lubricants that include PTFE, graphite or molybdenum disulfide. LE's exclusive Almasol solid additive has a higher load-carrying capacity and does not build upon itself as the other additives do.

Test Scope & Method

This test is used to determine the wear life and load-carrying capacity of bonded solid film lubricants by the Timken Test machine. The maximum wear life of the solid film lubricant applied to the surface of a rotating cup against a stationary block is determined along with the lubricant coefficient of friction.

Procedure

The spindle rotation speed is set to give a rubbing speed of 24-26 sliding feet per minute. After a break-in period of 30 seconds, a 10-lb load is applied. Additional 10-lb loads are applied after each 10-minute period for a total of 40-50 lb. A coefficient of friction reading is taken 10 minutes after the last weight has been placed. Failure occurs when the coefficient of friction value is double the initial reading. The wear life is recorded as the number of revolutions to failure.