

Product Data Sheet

Description

Nexus D-Moly Lube is a high-performance dry film lubricant based on molybdenum disulfide technology, offering exceptional lubricity and surface adhesion with minimal surface preparation.

It is formulated to dry rapidly at room temperature, forming a clean, durable, and long-wearing lubricating film. The coating is designed to perform under extreme operating conditions, withstanding temperatures up to **454°C (850°F)** while maintaining effective lubrication.

Nexus D-Moly Lube also exhibits electrical conductivity, making it suitable for applications where both lubrication and electrical continuity are required.

Applications

Nexus D-Moly Lube is recommended for:

- Lubrication of sliding surfaces, gears, cams, and bearings under high load conditions
- High-temperature applications where conventional oils and greases are unsuitable
- Assembly lubrication to prevent galling and seizure
- Fasteners, threads, and metal-to-metal contact surfaces
- Electrical contact points requiring both lubrication and conductivity
- Textile machinery, including components exposed to heat, friction, and contamination (e.g., guides, cams, and moving parts)
- Applications requiring clean, dry lubrication without oil contamination

Benefits

- **High Load Carrying Capacity**
Reduces friction and wear under extreme pressure conditions
- **Excellent High-Temperature Performance**
Maintains lubrication up to 454°C (850°F)
- **Dry Film Lubrication**
Leaves a clean, non-oily surface that resists dust and dirt buildup
- **Rapid Drying at Room Temperature**
Enables quick application and return to service
- **Strong Adhesion**
Bonds well to most surfaces with minimal preparation

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- **Electrical Conductivity**
Suitable for applications requiring conductive lubrication
- **Prevents Galling and Seizure**
Protects components during assembly and operation
- **Extended Service Life**
Forms a durable film that reduces maintenance frequency

Property	Method	Typical Value
Appearance	Visual	Dark grey / black coating
Base Type	—	Molybdenum disulfide (MoS ₂)
Solid Content (%)	ASTM D2369	25 – 35
Drying Time (Touch Dry)	Ambient	5 – 10 minutes
Drying Time (Fully Cured)	Ambient	12 – 24 hours
Operating Temperature Range	—	Up to 454°C (850°F)
Coefficient of Friction	ASTM D2714	0.03 – 0.08
Film Thickness (Dry)	—	10 – 25 microns
Adhesion	ASTM D3359	Good (4B – 5B)
Load Carrying Capacity	ASTM D2625	Pass (> 2500 N)
Electrical Conductivity	—	Conductive
Density @ 25°C	ASTM D4052	~0.90 – 1.10 g/cm ³
Flash Point	ASTM D92	> 200°C

*Subject to usual manufacturing tolerances

Nexus D-Moly Lube

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