DAYLube<sup>™</sup> NanoCeramic Lubricating Grease



Dayton's DAYLube™ NanoCeramic Lubricating Grease is a leading edge, extremely high-performance lubricant that has a wide range of industrial applications. DAYLube™ utilizes nano ceramic particles that act as sub-microscopic "bearings," providing continuous lubrication to steel surfaces. DAYLube™ gives you ten times the normal life, a much lower coefficient of friction at all temperatures, extraordinary adhesion, and higher load-bearing properties than traditional high-performance greases.

Superior performance. Better value. Extremely Durable. Longer Lasting.





Global leader in providing fabrication and stamping solutions

www.daytonlamina.com

DAYLube<sup>™</sup> Food Grade NanoCeramic Lubricating Grease



DAYLube™ is a high-performance, highly stable lubricant that delivers unmatched performance, durability, and wear resistance.

DAYLube™ outlasts PTFE greases in the same applications by ten times due to its lower friction coefficient and its ability to operate at a wider range of temperatures!

Nano ceramic particles—the key component—offer a lower coefficient of friction at all temperatures.

DAYLube™ has high load-bearing properties; a low dielectric constant; does not contain metal or silicone; and is resistant to water, steam, acids, and most chemical products. All of this gives DAYLube™ greater staying power, even under intense pressure and temperatures.

#### Features/Benefits:

- Food Grade—NSF H1 registered for incidental food contact.
- **Staying Power**—extraordinary adhesion extends production to 10 times that of other greases.
- **Shear Stability**—does not soften or run out. After 100,000 production strokes, shows no evidence of breaking down.
- **Operating Temperatures**—operates in a normal range from 0° F to 450° F, and up to 650° F intermittently.
- Extreme Pressure & Anti-Wear Protection—resists EP, provides exceptional stability without using lead, antimony, chlorine, zinc, barium, etc.
- Corrosion Resistant—resists water, steam, acid, and other chemicals.
- High Dropping Point—maintains viscosity across full temperature range.
- Low Coefficient of Friction—lower than PTFE greases.
- Chemically Inert—environmentally friendly.
- Low Dielectric Constant—excellent insulator.
- Resilient—upon cooling returns to original viscosity after reaching dropping point.

# **Nanotechnology**

Nanotechnology involves the development of materials, devices, and processes at the molecular level. In recent years, scientists have learned to fabricate molecules based on individual, task-specific designs. Today, nanotechnology is being used more and more to develop new, better, and more cost-effective products. One of those products is DAYLube™.

# DAYLube —The Ultimate in Machine Lubrication

Key components in DAYLube<sup>™</sup> are nano ceramic "bearings" that have an affinity for steel, and provide continuous lubrication at the surface. These are fabricated over a calcium sulfonate thickener within a mid-viscosity petroleum-based paste.

### **ASTME 4-Ball Weld Test**

In laboratory tests, DAYLube™ performed extremely well over both standard greases and other so-called "highperformance" lubricants. The following criteria were used:

- 3 ball bearings submerged in grease
- 500kg pressure applied to center bearing
- center ball bearing spun at 10,000 rpm
- 10 seconds with "no weld" passing grade

In standard grease tests, results showed an instant weld and catastrophic failure of all 4 bearings. In tests with competitive brands, a soft weld occurred after 2 seconds, and there was a complete failure and major damage to all bearings.

Tests with DAYLube<sup>™</sup> showed no weld after 10 seconds and minimal damage to all ball bearings. (See photo below.)



Competitive Grease



DAYLube"

# **Applications**

DAYLube<sup>™</sup> can be used in all types of applications from general purpose to extreme pressure and temperature environments even in areas where incidental food contact may occur.

Applications include (but are not limited to) the following:

- Bearings
- Bushings
- Cables
- Cams
- Chains
- Conveyors
- Gears
- Lifters
- Machine Parts
- Robotics
- Rods
- Slides
- Wear Plates





# **Industries Served**

- Aerospace
- Marine
- Agricultural
- Material Handling
- Automotive
- Medical/Scientific
- Can Makers
- National Defense
- Consumer Goods Pharmaceutical
- Food Processing
- Stamping &

- General
- **Fabricating**
- Manufacturing
- Truck & Bus





# **DAYLube** NanoCeramic **Lubricating Grease**

#### A Better Way. A Better Value.

DAYLube<sup>™</sup> is an extraordinary, state-of-the art lubricating grease. It provides exceptional friction reduction and wear resistance, and outlasts and outperforms virtually all other lubricating greases on the market.

It is also the best value on the market today.

When compared with the price of our closest competitor (using nanotechnology), the per ounce cost for DAYLube™ is considerably lower. Also, traditional PTFE lubricants are priced lower; however, the real value can be found in comparing the real life of the lubricants and considering the additional cost of maintenance and downtime.

DAYLube™ remains on the surface longer, extending production up to ten times that of PTFE lubricants. Further, DAYLube™ has much greater shear stability than other lubricants. In laboratory and on-site tests, the change in penetration after 100,000 strokes is low—meaning the grease did not soften under shear. Both longer run times and greater shear stability mean less total product cost, less maintenance, and far less downtime for lubricating.

In addition, DAYLube™ operates in a far wider range of temperatures than traditional lubricants, making it more versatile than PTFE products. For all practical purposes, you simply cannot purchase PTFE lubricants that will operate in this wide temperature range. Also, it is environmentally friendly.

Dayton products represent the best of the best, offering both top quality and outstanding value. DAYLube™ is no exception.

### **Ordering Information**

DAYLube™ NanoCeramic Lubricating Grease is ordered by quantity and product numbers. DAYLube is available in 16 oz. tubes, 16 oz. jars, 1 gallon or 5 gallon bucket. 16 oz. tubes and jars can be ordered individually or by the case.

#### **HOW TO ORDER**

Specify:	Qty.	<b>Product Number</b>	Description
Example:	7	NLGF16	16oz. Tube
	2	NLGF192	Case (12 16oz. Tubes)
	3	NLGF16J	16oz. Jar
	1	NLGF192J	Case (12 16oz. Jars)
	2	NLGF128	1 Gallon/7# Tub
	1	NLGF640	5 Gallon/35# Pail



## **Commitment to Quality & Customer Satisfaction**

Dayton Lamina is a leading manufacturer of tool, die and mold components for the metal-working and plastics industries. As a customer-focused, world-class supplier of choice, we provide the brands, product breadth, distribution network and technical support for all your metal forming needs.

Our goal is to give our customers the most innovative and valueadded products and services.



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\*Dayton Lamina's line of Danly products is available only to North America.

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