

# DAYLube™ Food Grade NanoCeramic Lubricating Grease

## Product Description and Intended Use

DAYLube is an NLGI No. 2 high performance lubricating grease used where incidental contact with food is a possibility (NSF-H1). It also excels in applications where resistance to water washout and broad operating temperatures are absolutely necessary. The formulation of this product provides unsurpassed resistance to extreme pressures and corrosion, including salt spray. DAYLube also has exceptional mechanical stability even in the presence of water. It contains no heavy metals or other environmentally undesirable additives.

## Product Application

DAYLube can be applied from ambient temperatures of 0° F to + 450° F depending on lubrication system design and method of application. DAYLube has an operating range of 0° F to 450° F, and up to 650° F intermittently. Follow equipment manufacturer's recommendations concerning lubrication frequencies.

## Product Specifications

Color	white/off white
Texture	Smooth
NLGI Grade	2
Penetration, Unworked ASTM D 217	286
Penetration, Worked 60 Strokes, ASTM D 217	286
Penetration Change, 100000 Strokes, FTM 791C 313.2	+/-5%
Wheel Bearing, ASTM D 1263, Modified 325°F (163° C)	0.4 Grams
Dropping Point, ASTM D 2265	+750° F
Oxidation Stability, ASTM D 942, 100 hours at 99° C	1 psi (7 kPa)
Four-Ball Wear, ASTM D2266-B, 40 kg, 1200 RPM, 75°C, Scar mm	0.67 Max.
Four-Ball EP, Weld Point, ASTM D 2596, kgf	620
Timken OK Load, ASTM D 2509, Pounds	65
Copper Strip Corrosion, ASTM D 4048	1a
Corrosion Preventive Properties, ASTM D 1743	Pass
Oil Separation, ASTM D 1742	0.2 %
Water Washout, ASTM D 1264, 175°F (79° C), % Loss	2.75
Low Temperature Torque, ASTM D 1478, - 40° F (- 40° C), gram-cm	<5,000
Salt Fog Test, B-117, hours	+2,500
Base Fluid Properties:	
Viscosity @ 100° C, ASTM D 445, Centistokes	10.8
Viscosity @ 40° C, ASTM D 445, Centistokes	100
Viscosity @ 210° F, ASTM D 2161, SUS	63
Viscosity @ 100° F, ASTM D 2161, SUS	523
Viscosity Index, ASTM D 2270	90
Pour Point, ASTM D 97	-12° C Max.
Flash Point, ASTM D 92	220° C

## Safety-Disposal / Emergency and First Aid Procedures

- **Eye Contact**—If splashed into eyes, flush with clean water for 15 minutes or until irritation subsides. If irritation persists, call a physician immediately.
- **Skin Contact**—In case of skin contact, remove any contaminated clothing and wash skin thoroughly with mild soap and water. If irritation persists, call a physician immediately.
- **Inhalation**—Remove affected person to fresh air. Call a physician immediately.
- **Ingestion**—If ingested, call a physician immediately.

See Material Safety Data Sheet for additional information.

DAYLube should be stored indoors. Dispose in accordance with local authorities.

## Performance

- **Mechanical Stability**—Tests in the ASTM grease worker show virtually no change in consistency after 100,000 strokes. In addition, no significant change was observed in the conventional Shell Roll Test (D-1832). The Shell Roll test was modified from six hours at room temperature to 100 hours at 150°F, to increase the severity and again, no softening was observed.
- **Load Carrying Ability**—Timken values of 65 pounds OK load, LWI of 65 kg and weld point of 500 kg are typical for DAYLube. Four Ball Wear tests (D-2266) also demonstrate the excellent lubricity of this product.
- **Oxidation Stability**—Bomb oxidation stability tests (D-942) produced pressure drops of only 1 PSI after 500 hours and 8 PSI after 1,000 hours. These values reflect the excellent resistance of DAYLube to oxidation.
- **Resistance to Water**—In a variation of the ASTM work stability test, DAYLube was mixed with 50% water and after working 100,000 strokes, remained virtually unchanged in consistency. Other premium greases run in this test tend to slump or break down.
  - **Water Resistance**—DAYLube has exhibited excellent adhesion, high water absorption and no sign of breakdown.
  - **Water Washout (ASTM D-1264)**—DAYLube compares favorably to other greases in this test.
- **Corrosion Resistance**—In the Rust Test Rating (ASTM D-1743) DAYLube passes this test and is equivalent to other premium greases. In a more severe version of this test, modified with synthetic sea water, DAYLube still gives a pass rating.

## Packaging

DAYLube is available in tubes, jars, tubs and pails.

## DOT Labeling Requirements

Hazardous Materials Description and Proper Shipping Name (49 CFR 172.101)	Hazardous Class (49 CFR 172.101)
Not Regulated	Not Applicable

