

THIXOGREASE PROVEN THROUGH INDEPENDENT TESTING TO BE THE SUPERIOR GREASE SOLUTION

ThixOgrease



Independent tests have concluded **THIXOGREASE** to be superior in all categories. These tests were regulated by NLGI, the National Lubricating Grease Institute and ASTM, the American Society for Testing Materials. They confirmed that **THIXOGREASE** is highly efficient for use in centralized grease systems and offered superior performance in applications including industrial, automotive, marine, farming and mining.

Test results prove it!

- Proven effective in heavy unit loading up to 200,000 PSI
- Superior performance at elevated temperatures
- Maintains consistency over extended use, extreme pressure and heat
- Highly compatible with residual greases
- Excellent resistance to water and oxidation
- Minimal contamination risk

Resistance to Water			
Grease Type	THIXOGREASE	Lithium* Complex	Poly* Urea
NLGI Grade	2	2	2
100,000 with 50% Water 60X	+5	N/A	N/A
Water Wash Out D1264 at 70°C Loss	2.7	N/A	N/A
Shell Roll D1831 as Received	290	N/A	N/A
After 2 Hours Rolling with 50% Water (77°F)	279	N/A	N/A
Rust Test D1743 Rating	Pass	Pass	Pass
ASTM B117-73 Salt Spray Test Hours to Failure at 1.5 mil	950	48	48

High Temperature Capabilities				
Grease Type	THIXOGREASE	Lithium* Complex	Aluminum* Complex	Poly* Urea
NLGI Grade	2	2	2	2
Dropping Point D566	570+°F (300+°C)	570°F (300°C)	550°F (288°C)	463°F (239°C)
Wheel Bearing Leakage D1273 Modified at 163°C Grams	0.2	3.1	1.2	0.8
Lubrication Life D3336 at 300°F (149°C), No. 204 Bearing, 10,000 RPM Hrs. to Failure	800	580	97	420
Reversibility	Yes	No	Yes	No

*Data reprinted from Lubrication Engineering

Extreme Pressure Performance and Wear Protection				
Grease Type	THIXOGREASE	Lithium* Complex	Aluminum* Complex	Poly* Urea
NLGI Grade	2	2	2	2
Timken OK Load D2509 Lbs	270	65	60	70
4-Ball EP Test D2596 LWI Weld Point Kg	>95	45	45	80
4-Ball Wear Test D2266 [mm] Scar 40 Kg, 1200 RPM, 75 °C 1 Hour	0.30	0.50	0.55	0.35

Picture 1: Steel balls welded together in standard 4 ball EP wear with traditional Lithium complex grease

Picture 2: Steel balls coated in Thixogrease remain unmarked and moving freely in 4 ball EP wear test with 4 times the load of the previous test.

Shear Stability				
Grease Type	THIXOGREASE	Lithium* Complex	Aluminum* Complex	Poly* Urea
NLGI Grade	2	2	2	2
Pen at 25°F, D217mm/10 Pen Worked 10,000 60X	+1	+10	+15	+15
100,000 60X	+2	+30	+45	+60
Roll Stability D1831				
Worked Penetration as Received	290	N/A	N/A	N/A
After 2 Hours at Ambient	302	Liquified	Liquified	Liquified
After 100 Hours at 150°F	296	Liquified	Liquified	Liquified



THIXOGREASE REDUCES FRICTION CAUSED BY ASPERITY (METAL TO METAL) CONTACT

Typical Properties of THIXOGREASE		
Property	Method	Result
Color Texture		Brown Smooth, buttery
NLGI Grade		NLGI #2
Penetration	ASTM D217	280
Dropping Point	ASTM D2265	> 570°F (300°C)
Kinematic Viscosity @40°C (104°F) @100°C (212°F)	ASTM D445	130 cSt 13 cSt
Viscosity Index	ASTM D2270	95
Pour Point	ASTM D97	-5°F (-15°C)

Special Notations on THIXOGREASE	
Operating Temperature Range:	Power Up Thixogrease has been proven to be suitable for applications at temperatures from 0°F to 480°F (-18°C to 250°C). It is easily pumpable at extremely low temperatures and has a dropping point greater than 570°F (300°C), allowing its use in applications with brief excursions to 500°F (260°C).
NLGI Specifications:	Power Up Thixogrease meets or exceeds the specifications of the NLGI GB-LB classification for heavy duty chassis lubrication and medium wheel bearing applications.
Compatibility:	Where possible, it is always recommended that the old grease be cleaned out of any bearing prior to the application of a different type or grade of grease. The grease compatibility chart provided is a general guide only and may not be true for all brands of the given greases.

Test Data on THIXOGREASE		
Property	Method	Result
Timken OK Load	ASTM D2509	> 70 lbs (31kg)
4 Ball E.P. - LWI - Weld Load	ASTM D2596	75 1,100 lbs (500kg)
4 Ball Wear	ASTM D2266	0.37mm
Corrosion Preventative Properties	ASTM D1743	Pass
Oil Separation	ASTM D1742	0.27%
Water Washout	ASTM D1264	0.10% loss

** Typical Properties and Test Data of NLGI #0 Available on Request



"In our Letourneau 800 we were having repeated failures on our bucket tip pins. After switching to Thixogrease, we went an entire year without any failures saving us over \$100,000 per year on this one application in part replacement, maintenance costs and downtime. We also cut our grease consumption down 67% because Thixogrease does not separate."
Maintenance Supervisor, Obed Mountain Coal - Alberta, Canada

HIGH FILM STRENGTH IN HIGH PRESSURE APPLICATIONS



THIXOGREASE PROVIDES SUPERIOR PROTECTION
WHERE RELIABILITY IS MOST CRITICAL

THIXOGREASE is currently available in following grades:

NLGI No. 0 - Most suitable for centralized grease systems, this grease is readily pumpable and will not bleed excessively or age harden.

NLGI No. 2 - A multi-purpose grease when superior lubrication performance is required. **THIXOGREASE** No. 2 is successfully used in the industrial, automotive, marine, farming, mining, forestry and construction industries.

Thixo Tak 2 - Also available is a tackier version of Thixogrease for high speed applications where grease retention is required.