



Premalube™

**Multi-Purpose, Heavy Load, Extreme Pressure,
High Temperature Grease**

NLGI # 2, 1, 0, 00,000



Heavy duty aluminum complex grease specifically formulated for construction and heavy industrial equipment.

Provides superior protection for equipment against, heavy loads, dirt, dust, water, and heat.











PRODUCT OF CHOICE FOR ALMOST EVERY HEAVY DUTY APPLICATION

Provides Superior Equipment Protection for

- Industrial Manufacturing
- Food Processing
- Steel Mills & Foundries
- Paper Mills, Printing, & Packaging
- Construction, Mining, Agriculture
- Excavation & Demolition
- Utility Construction
- Concrete & Asphalt Paving
- Federal, State & Local Agencies



-  **Stays in Place to Prevent Wear Under Heavy-Load Conditions**
-  **Exceptional Heat Reversion Properties**
-  **Contains Molybdenum Disulfide to Minimize Abrasive Wear Caused by Dirt and Dust**
-  **Superior Water Resistance**
-  **Prevents Rust and Corrosion**
-  **Reduces Grease Inventory to Save Money**
-  **Excellent High Temperature Performance - NLGI #2 remains effective 275°F continuous and 400°F intermittent with monitored lubrication.**
-  **Also Available in a Red Formula NLGI #2, 1, 0, 00, 000**

Premalube Meets or Exceeds these Performance Requirements

- US Steel Mill Grease Specifications
 - Roll Neck Grease, Req. No. 340
 - Extreme Pressure Grease Req. No. 350
 - Extra Duty EP Grease, Req. No. 352
 - Extreme-Temp. Req. No. 355, 370, & 372
 - Ball and Roller Bearing, Req. No. 371
 - Mill Utility Grease Req. No. 375
- Military Spec. MIL-G-23549C
- Case 251H EP
- Caterpillar MPG
- Ford M1693A

USDA H2



PREMALUBE and **PREMALUBE RED** contain a total additive package that sets it apart from other greases.

Additives

User Benefits

Premium Grade Base Oil	Superior grade, highly-refined base oil resists oxidation, hardening and high-temperature breakdown to maintain better lubricity.
Aluminum Complex Base	Withstands high heat - is the only lubricant with heat reversion characteristics. Resists water washout.
Molybdenum Disulfide (Premalube Red contains Solumol™)	Layered solid lubricant that plates on metal surfaces to provide excellent protection against wear on heavily loaded surfaces and in dusty, dirty environment.
Solumol™	Clear, synthetic moly that provides a non-staining barrier film for excellent heavy load protection. Provides the benefits of moly without the black.
Adhesive and Cohesive Polymers, Tackiness Agents	Highly-elastic polymers hold grease together and in place to prevent the entry of contaminants, squeeze-out, channeling and sling-off.
Rust and Corrosion Inhibitors	Block out corrosive elements such as acids, water, condensate and steam by forming a protective barrier on equipment surfaces to prevent chemical wear.
Extreme Pressure (EP) Agents	Heat seeking additive which increases the ability of the lubricant to prevent the extreme wear that can occur under loads.
Anit-Wear and Friction Reducing Additives	Prevent metal-to-metal contact, two-surface wear, vibration and chatter. Keeps high friction surfaces, such as bearings, properly lubricated to prevent metal loss, downtime, and replacement expenses.
Oxidation Inhibitors	Extend service life of the lubricant by retarding the oxidation or breakdown process.
Shock Load Reducers	Cushion impact to minimize the stress, vibration and chatter that can occur under heavy loads and during start-stop operations.
Graphite (Premalube Red contains Polymite™)	Layered solid that provides added protection at high temperatures and improves lubrication in wet conditions.
Polymite™	Provides the thermal stability and water wash-out properties of graphite without the black color.

Physical Properties	#2	#1	Red #2	Red #1	Red #0	Red #00	Red #000
Pounds per Gallon	8.34	7.5	6.88	8.34	7.55	7.61	7.66
Evaporation Rate	ND	<0.01	<1	<0.011	<0.1	<0.1	<0.1
Timken, OK Load, LB	65	65	60	60	60	60	60
4 Ball Wear, MM	0.4	0.4	0.73	0.69	0.55	0.55	0.47
4 Ball Weld Point, KG	800	800	400	250	250	250	315
Load Wear Index	101	100	53.4	28.25	27	26	40.8
Oxidation Stability 100 Hrs @210F PSI	2	2	2	3	3	3	3
Oxidation Stability 500 Hrs @40F PSI	8	8	7	9	9	9	9
Maximum Continuous Temperature, F	275	275	275	275	275	275	275
Maximum Temperature, F	400	400	400	400	400	400	400
Rust Test	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Copper Corrosion	1B	1B	1B	1B	1B	1B	1B
Heat Reversion	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Base Oil Viscosity SUS at 100F Maximum	1230	750	1250	750	600	600	1235
Base Oil Viscosity SUS at 210F Minimum	80.5	41.5	80	41.5	31	32	80
Pour Point, F	-20	-20	-20	-20	-10	-10	-10
Voc %	0	0	0.05	0	0	0	0
Penetration @77F 60 strokes	265-285	310-340	265-295	310-340	355-385	400-430	445-475
Penetration Change after 10,000 strokes, %	5.22	6.8	5.6	4.2	10	10	15
Dropping Point, F	500+	500	500+	475	493	484	N/A
Water washout	3% Max	3% Max	2.5% Max	4.5% Max	N/A	N/A	N/A

Ideal for use on: bearings, journals, couplings, gears requiring grease, universal joints, rollers, conveyors and any other rolling or sliding surface.

Do not use on: bearings that exceed 4500 RPM, or applications with operating temperatures above 500°F. For grease recommendations refer to Lubemaster DN chart.

PREMALUBE Limited Warranty

Under operating conditions of all types, customers find that PREMALUBE lasts from 2 to 5 times longer than conventional greases.

The LubeMaster division of Certified Laboratories is so confident PREMALUBE will last longer in your operations, that we will replace the amount of PREMALUBE in your equipment at NO CHARGE if it does not extend regreasing intervals by *at least twice* the equipment manufacturer's recommended interval.

Grease Properties	Test Methods and Descriptions	Certified Labs Premalube	Mobil Ronex MP	CITGO LithiPLEX MP	Performance Benefit
Shear Stability	Multi-stroke Penetration: ASTM D 217 test measures the percent change in viscosity of the grease between an unworked and a worked state. The lower the percent change, the more mechanically stable the grease.	2%	Data Not Available	5%	The ability of grease to resist a change in consistency during mechanical working.
	Wheel Bearing Leakage: ASTM D 1263 measures the percent loss in a wheel bearing application. The lower the percentage, the better; above 5% will cause brake problems.	<3%	Data Not Available	Data Not Available	
Oxidation Resistance	Bomb Oxidation: ASTM D 942 measures the oxidative life of the grease; this is used to help determine the shelf life.	0.1%	Data Not Available	Data Not Available	The resistance of grease to the process of oxidation.
Water Resistance	Water Washout: ASTM D 1264 measures the resistance of a grease to washout; the lower the percent, the less likely it will washout.	2%	Data Not Available	2%	The ability of the grease to resist water and wet conditions.
	Water Spray-Off: ASTM D 4049 measures the resistance of a grease to spray-off; the lower the percent, the less likely it will washout.	<5%	Data Not Available	Data Not Available	
Bleed Resistance	Oil Separation (Static): FTM 321.3 measures the percent oil that may separate during storage and idle time; the lower the percent, the more resistant the grease is to separating.	<2%	Data Not Available	Data Not Available	The resistance of grease to separate.
	Pressure Oil Separation: ASTM D 1742 measures the percent oil that will separate when grease is under load; the lower the percent, the more resistant the grease is to separating.	<2%	Data Not Available	Data Not Available	
Extreme Pressure/Anti-Wear	Four Ball: ASTM D 2596 measures point contact, similar to ball bearings; the higher the number, the greater load carrying ability of the grease. (NOTE: The Timken OK Load Test has been disqualified as a viable test method due to the high degree of variability in test results. This test method produces a 20% spread in reproducibility and repeatability.)	800+kg	150kg	315kg	The ability of grease to handle extreme pressures and resist wear
	Four Ball (Wear Scar): ASTM D 2266 measures wear protection the grease provides; the lower the number, the more protection the grease provides.	0.4	.5	.45	
Corrosion	Rust Test: ASTM D 1743 is a static test that determines how well the grease keeps water and corrosives away from the metal surface.	1A	1A	1A	How well a grease can protect the metal surface from corrosion.
	Copper Corrosion: ASTM D 130 measures the ability of the grease to protect yellow metals.	Pass	Pass	Pass	
Pumpability	Mobility: US STEEL LT37 measures the grease flow at a given temperature at 150 psi; the higher the number the better.	22g/min	Data Not Available	Data Not Available	The ease of pumpability of a grease.
Service Temperature	Dropping Point: ASTM D 2265 measures the temperature that the soap in the grease melts; this is used to help determine the upper operating temperature range.	500+°F	280°F 530	°F	The temperature at which the grease turns to a liquid.