



Multiplex® Red

Phillips 66® Multiplex Red is a high-performance, multipurpose, extreme pressure (EP) lithium complex grease developed for the lubrication of automotive and industrial equipment operating under heavy loads and at moderate to high temperatures. It is particularly recommended for use in applications that are too severe or require higher performance than that provided by conventional extreme-pressure lithium greases.

Multiplex Red is manufactured with high-quality base oils, a special polymer and a lithium complex soap thickener. It is fortified with extreme pressure and antiwear additives, a tackifier, and rust and oxidation inhibitors to provide outstanding wear protection, excellent thermal stability at high temperatures, and excellent resistance to corrosion and water washout. It forms an effective seal to help minimize bearing contamination and provides a high level of adhesion to bearing surfaces for improved retention, reduced leakage and excellent resistance to water washout. It is dyed red for ease of identification.

Multiplex Red Grades No. 1 and No. 2 are NLGI GC-LB certified for use as multipurpose automotive wheel bearing and chassis lubricants.

Applications

- Wheel bearings of passenger cars, trucks, high-performance vehicles, sport utility vehicles and motorcycles, particularly vehicles with disc brakes
- Ball joints, universal joints, other chassis parts and water pumps on passenger cars, trucks and other mobile equipment
- Heavily-loaded plain and rolling-element bearings in industrial, mining and mobile equipment

Features/Benefits

- Excellent high-temperature performance
- Outstanding wear protection
- High load-carrying capacity
- Excellent resistance to water washout
- Protects against rust and corrosion
- Good low-temperature pumpability
- NLGI GC-LB certified (Grades No. 1 and No. 2)

**Multipurpose
Extreme-
Pressure
Lithium
Complex
Grease; NLGI
GC LB Certified**

**KEEPING THE
WORLD
RUNNING
SMOOTHLY.**





Multiplex® Red

Typical Properties			
NLGI Grade	0	1	2
Thickener	Lithium Complex	Lithium Complex	Lithium Complex
Color	Dark Red	Dark Red	Dark Red
Dropping Point, °C (°F)	250 (482)	271 (520)	271 (520)
Density, lbs/gal	7.48	7.48	7.48
Penetration, ASTM D217 (worked 60 strokes)	355-385	310-340	265-295
Texture	Tacky	Tacky	Tacky
Four-Ball EP, ASTM D2596, Weld Load, kgf	400	400	400
Four-Ball Wear, ASTM D2266, Scar Diameter, mm	<0.60	<0.60	<0.60
Oxidation Stability, ASTM D942, 100 hrs			
Pressure Drop, psi (kPa)	5 (35)	5 (35)	5 (35)
Rust Prevention, ASTM D1743	Pass	Pass	Pass
Timken OK Load, ASTM D2509, lb	70	70	70
U.S. Steel Mobility, g/sec			
@ 4°C (40°F)	4.55	2.18	1.04
@ -7°C (20°F)	1.03	0.57	0.26
@ -18°C (0°F)	0.20	0.11	0.05
Base Oil Properties			
Viscosity (with polymer)			
cSt @ 40°C	170	170	220
cSt @ 100°C	13.8	13.8	18.0
SUS @ 100°F	905	905	1,170
SUS @ 210°F	75	75	93
Viscosity Index	70	70	89
Usable Temperature Range			
°C	-34 to 149	-34 to 177	-34 to 177
°F	-30 to 300	-30 to 350	-30 to 350

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.