



Multiplex® 460

Phillips 66® Multiplex 460 is a premium quality, adhesive, extreme pressure (EP), lithium complex grease specially developed for use in demanding industrial applications such as steel rolling mills where high loads, high temperatures and/or wet conditions exist.

Multiplex 460 is manufactured with a lithium complex soap thickener, high viscosity base oils and a high performance tackifier. It is fortified with EP and antiwear additives as well as rust and oxidation inhibitors. It is an adhesive grease designed to have excellent resistance to water spray-off and adhesion to bearing surfaces. This provides protection of metal parts against rust and corrosion and superior lubrication in extremely wet environments, specifically those found in steel rolling mills where bearings are exposed to large volumes of cooling water. It has excellent oxidation resistance providing a long service life and a high load carrying capacity for excellent wear protection.

Applications

- Rolling mills, hot roll tables, continuous casters, ingot buggies and slab mills
- Steel mill rolling bearings, conveyers and gears
- Heavily loaded plain and rolling element bearings in industrial and mobile equipment
- Chassis parts on heavy mobile equipment

Features/Benefits

- Excellent oxidation resistance and thermal stability at high temperatures
- Excellent EP and antiwear properties
- High load carrying capacity
- High shear stability
- Excellent resistance to washout and water spray-off
- Good adhesion to metal surfaces
- Protects against rust and corrosion
- High dropping point (>500°F)
- Does not contain heavy metals or other environmentally undesirable components

**Premium
Industrial
Adhesive
Extreme Pressure
Lithium Complex
Grease**

**KEEPING THE
WORLD
RUNNING
SMOOTHLY.**





Multiplex[®] 460

Typical Properties			
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NLGI Grade			
Thickener Type		Lithium Complex	Lithium Complex
Color		Green	Green
Texture		Smooth/Tacky	Smooth/Tacky
Density, lbs/gal		7.73	7.76
Dropping Point, °C (°F)	ASTM D2265	>260 (>500)	>260 (>500)
Viscosity, Kinematic	ASTM D445		
Viscosity @ 40°C, cSt		415	415
Viscosity @ 100°C, cSt		26.8	26.8
Penetration, Worked (60 strokes)	ASTM D217	310-340	265-295
Oxidation Stability, 100 Hours, psi (kPa)	ASTM D942	3 (20.7)	3 (20.7)
Four-Ball Wear Scar, mm	ASTM D2266	0.44	0.44
Four-Ball EP, Weld Load, Kgf	ASTM D2596	500	500
Timken OK Load, lbs	ASTM D2509	55	55
Corrosion Prevention	ASTM D1743	Pass	Pass
Copper Corrosion	ASTM D4048	1b	1b
Water Washout, mass loss, %	ASTM D1264	<3	<3
Water Spray-off, wt%	ASTM D4049	28	6.5

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/SDS>