

Megaplex® XD5

Phillips 66® Megaplex XD5 is a high-performance, multipurpose, extreme pressure (EP) lithium complex grease developed to satisfy the severe lubrication requirements of mining and off road equipment manufactured by Caterpillar, Terex, Komatsu Dresser, Le Tourneau, P&H and others. It is particularly recommended for use in AC and DC electric-drive haul trucks, cranes, scrapers, shovels and drag lines operating in severe service under heavy or shock loads.

Megaplex XD5 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, 5% molybdenum disulfide (moly), a tackifier, and rust and oxidation inhibitors to provide excellent wear protection as well as excellent corrosion protection and resistance to water washout in equipment operating under wet conditions and/or high temperatures and subject to heavy or shock loading.

Megaplex XD5 Grades No. 0 and No. 1W are formulated with lower-viscosity base oils than the other two grades for better pumpability at low ambient temperatures.

Applications

- Chassis parts and wheel bearings on mining and other off-highway equipment
- Hydraulic excavator mining shovels, such as Caterpillar 5100 & 5200 series
- Mine haul trucks
- Heavily-loaded plain and rolling-element bearings in industrial and mobile equipment where the manufacturer specifies a high-temperature, extremepressure grease with 5% moly

Features/Benefits

- High dropping point (500°F)
- High load-carrying capacity
- Excellent wear protection
- Contains 5% moly for extra protection against galling and wear under shock loads
- Excellent resistance to water washout
- Excellent resistance to separation
- Protects against rust and corrosion

Extreme
Pressure
Lithium
Complex Grease
with 5% Moly
for Construction
and Off-Road
Equipment





Megaplex® XD5

| Typical Properties | | | | |
|--|--------------------|--------------------|--------------------|--------------------|
| NGLI Grade | 0 | 1W | 1 | 2 |
| Thickener | Lithium Complex | Lithium Complex | Lithium Complex | Lithium Complex |
| Color | Gray-Black | Gray-Black | Gray-Black | Gray-Black |
| Dropping Point, °C (°F) | 260 (500) | 260 (500) | 260 (500) | 260 (500) |
| Density, lbs/gal | 7.92 | 7.92 | 7.96 | 7.99 |
| Penetration, ASTM D217 | | | | |
| Worked 60 strokes | 355-385 | 310-340 | 310-340 | 265-295 |
| Texture | Tacky | Tacky | Tacky | Tacky |
| Molybdenum Disulfide, wt % | 5 | 5 | 5 | 5 |
| Four-Ball EP, ASTM D2596, Weld Load, kgf | 315 | 315 | 315 | 400 |
| Four-Ball Wear, ASTM D2266 | | | | |
| Scar Diameter, mm | 0.50 | 0.65 | 0.50 | 0.50 |
| Oxidation Stability, ASTM D942, 100 hrs | | | | |
| Pressure Drop, psi (kPa) | 4 (28) | 4 (28) | 4 (28) | 4 (28) |
| Rust Prevention, ASTM D1743 | Pass | Pass | Pass | Pass |
| Timken OK Load, ASTM D2509, lb | 55 | 50 | 55 | 55 |
| Base Oil Properties | | | | |
| Viscosity (with polymer) | 2,470 | | 2,470 | |
| cSt @ 40°C | 180 | 140 | 245 | 470 |
| cSt @ 100°C | 13.7 | 13.0 | 19.0 | 30.0 |
| SUS @ 100°F | 962 | 739 | 1,304 | 2,526 |
| SUS @ 210°F | 75 | 72 | 97 | 147 |
| Viscosity Index | 60 | 83 | 86 | 92 |
| Usable Temperature Range | | | | |
| °C | -34 to 149 | -34 to 149 | -29 to 177 | -18 to 177 |
| °F | -30 to 300 | -30 to 300 | -20 to 350 | 0 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.