

Mobilgrease XHP™ Mine Series

Mobil Grease, Canada

Premium Lithium Complex Grease with Molybdenum Disulfide

Product Description

The Mobilgrease XHP™ Mine products are specifically designed for the lubrication of extra heavy-duty off-highway and mining equipment. With a complete range of NLGI Grades, this series of lithium complex greases, which contain 5% molybdenum disulfide, can be utilized over a wide range of operating conditions and temperatures to improve productivity. The Mobilgrease XHP Mine series has excellent extreme pressure and anti-wear properties in addition to exceptional staying power, very good water wash-out, water spray-off, and extended service capabilities under harsh operating conditions. These extra heavy-duty service greases exhibit excellent structural stability. They will not corrode steel or copper bearing alloys and are compatible with conventional sealing materials.

Mobilgrease XHP 320 Mine, 321 Mine, and 322 Mine were developed especially for their superior performance in bucket pins, pivot pins, and heavily loaded chassis components. Mobilgrease XHP 100 Mine and 320 Mine are especially suited for heavy equipment central lubrication systems requiring an NLGI 0 Grade grease. Mobilgrease XHP 100 Mine and 320 Mine are recommended by ExxonMobil for use in central lubrication systems found on off-highway and mining equipment. Mobilgrease XHP 100 Mine exhibits good dispensability down to -50°C (-58°F). Mobilgrease XHP 321 Mine is a NLGI 1 Grade with very good low temperature pumpability developed for use in colder temperatures. Mobilgrease XHP 322 Mine is a NLGI 2 Grade for use as a general purpose chassis lube.

Features and Benefits

Mobilgrease XHP 100 Mine, 320 Mine, 321 Mine, and 322 Mine are leading members of the Mobilgrease brand of products, which has gained a reputation for innovation and performance excellence. The Mobilgrease XHP Mine Series is designed by ExxonMobil formulation technologists and backed by our worldwide technical support staff.

Mobilgrease XHP 100 Mine, 320 Mine, 321 Mine, and 322 Mine were specifically designed to meet the needs of off-highway and mining equipment that required exceptional EP / anti-wear performance and which would remain in place even in tough conditions of water spray, high sliding, and high temperatures. These greases offer the following features, advantages, and potential benefits:

| Features | Advantages and Potential Benefits | | |
|---|--|--|--|
| Excellent EP and anti-wear properties | Superb equipment protection and potential equipment life extension even in severe operating conditions | | |
| High level of molybdenum disulfide | Optimum equipment protection in high sliding mechanisms and with extended re-lubrication intervals | | |
| Exceptional resistance to water washout and spray-off | Ensures proper lubrication and protection even in hostile work environments | | |
| Very good low temperature pumpability and centralized system capability (Mobilgrease XHP 100 Mine and 320 Mine) | Provides excellent low temperature pumpability and start-up performance, a key feature for remote applications | | |

Applications

Mobilgrease XHP 100 Mine, 320 Mine, 321 Mine, and 322 Mine are recommended for severe off-highway and mining applications in terms of operational severity and water spray. Specific applications include:

- Bucket pins, pivot pins, and heavily loaded chassis components
- Heavy equipment central lubrication systems
- General purpose chassis lubrication

Properties and Specifications

| Property | MOBILGREASE XHP 100 MINE | MOBILGREASE XHP 320 MINE | MOBILGREASE XHP 321 MINE | MOBILGREASE XHP 322 MINE |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Grade | NLGI 0 | NLGI 0 | NLGI 1 | NLGI 2 |
| Thickener Type | Lithium Complex | Lithium Complex | Lithium Complex | Lithium Complex |
| Base Oil Viscosity of Greases @ 40 C, mm2/s, AMS 1697 | 100 | 320 | 320 | 320 |
| Color, Visual | Gray-Black | Gray-Black | Gray-Black | Gray-Black |
| Copper Strip Corrosion, Rating, ASTM D4048 | 1A | 1A | 1A | 1A |
| Corrosion Preventive Properties, Rating, ASTM D1743 | PASS | PASS | PASS | PASS |
| Dropping Point, °C, ASTM D2265 | 200 | 270 | 270 | 270 |
| Four-Ball Extreme Pressure Test, Weld Load, kgf, ASTM D2596 | 315 | 400 | 400 | 400 |
| Four-Ball Wear Test, Scar Diameter, mm, ASTM D2266 | | 0.4 | 0.4 | 0.4 |
| Four-Ball Wear Test, Scar Diameter, 40 kg, 1200 rpm, 1 h, 75 C, mm, ASTM D2266 | 0.4 | | | |
| Molybdenum Disulfide Content, wt %, CALCULATED | 5 | 5 | 5 | 5 |
| Penetration, 60X, 0.1 mm, ASTM D217 | 370 | 370 | 325 | 280 |
| Roll Stability, Penetration Consistency Change, 0.1 mm, ASTM D1831 | +14 | 0 | ±10 | ±10 |
| US Steel Mobility @ - 20 F, g/min, AMS 1390 | 32 | | | |
| US Steel Mobility @ -12 C, g/min, AMS 1390 | | | | 11 |
| US Steel Mobility @ 20 F, g/min, AMS 1390 | | | 15 | |
| Water Sprayoff, Loss, %, ASTM D4049 | | | 28 | 16 |
| Water Washout, Loss @ 79 C, wt%, ASTM D1264 | | | 10 | 2 |

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

 $All\ trademarks\ used\ herein\ are\ trademarks\ or\ registered\ trademarks\ of\ Exxon\ Mobil\ Corporation\ or\ one\ of\ its\ subsidiaries\ unless\ indicated\ otherwise.$

10-2020

Imperial Oil

Petroleum and Chemicals Division Lubricants and Specialties 240 Fourth Ave SW C. P. 2480, Station M Calgary AB T2P 3 M 9

1-800-268-3183

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

