



Mobil Polyrex 461 EP

Mobil Grease , Czech Republic

High temperature multi-purpose grease

Product Description

Mobil Polyrex™461 EP is a shear-stable polyurea grease with excellent extreme-pressure (EP) and load-carrying characteristics. The proprietary polyurea thickener system exhibits excellent resistance to oxidation and oil separation at operating temperatures as high as 170°C. With its outstanding high-temperature oxidation stability, load-carrying capability, shear stability, water resistance and wide operating temperature range, Mobil Polyrex™461 EP is an excellent multi-purpose grease for a wide array of industrial applications such as steel mills and wood pellet machines. This grease has excellent pumpability in central grease systems. Recommended operating temperature range is from -20 °C to 170 °C.

Mobil Polyrex™461 EP meets the claim by DIN KPF1 P-20.

Features and Benefits

EXTREME-PRESSURE PROTECTION AND THERMAL STABILITY

Mobil Polyrex™461 EP contains a proprietary extreme-pressure package with solid additives that provides load-carrying capability without degrading the thermal stability of the grease at high temperatures. This grease can provide a high level of wear and extreme-pressure protection up to 170°C without rapid oxidation of the anti-wear EP additives. Very good anti-oxidation protection imparted by the advanced polyurea thickener.

EXCELLENT PUMPABILITY IN CENTRALIZED GREASE SYSTEMS

Due to consistency grade NLGI 1 this grease is suitable for long distribution systems with very good mobility down to 0°C. Grease can allow to stretch performance to -20°C depending on central system design.

GOOD WATER PROTECTION

Mobil Polyrex™461 EP provides an effective water resistance to keep grease in place. Corrosion prevention protects bearings in presence of water

Applications

Suitable for medium to slow speed moving plain or roller bearings exposed to high temperatures, severe load and shock loading in the following industrial applications:

Steel mill continuous casters & roll mills

Wood pellet mills

Cement, Glass, Mining, Chemical plants equipment

Specifications and Approvals

This product meets or exceeds the requirements of:
DIN 51825:2004-06 - KPF 1 P -20

Properties and Specifications

Property	
Grade	NLGI 1
Copper Strip Corrosion, Rating, ASTM D4048	1B
Rust, Rating, ASTM D1743	Pass

Property	
SKF Emcor Rust Test, Distilled Water, ASTM D6138	0-1
Four-Ball Extreme Pressure Test, Weld Load, kgf, ASTM D2596	400
Four-Ball Wear Test, Scar Diameter, mm, ASTM D2266	0.5
Flow Pressure at -20C, mbar, DIN 51805	900
Water Washout, Loss @ 79 C, wt%, ASTM D1264	1
Base Oil Viscosity of Greases @ 40 C, mm2/s, AMS 1697	460
Color, Visual	Green
Texture, VISUAL	Smooth and Tacky
Dropping Point, °C, ASTM D2265	255
Penetration, 60X, 0.1 mm, ASTM D217	325

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

05-2020

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 properties may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://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 entity.

ExxonMobil

Exxon

Mobil

Esso

XTO

© Copyright 2003-2024 Exxon Mobil Corporation. All Rights Reserved