



## Mobil Polyrex 461 EP

Mobil Grease , Germany

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 KPF1P-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 or 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

|   |
|---|
| <b>This product meets or exceeds the requirements of:</b> |
| DIN 51825:2004-06 - KPF 1 P -20                           |

### Properties and Specifications

| Property |        |
|----------|--------|
| Grade    | NLGI 1 |

| Property   |                  |
|--|------------------|
| Copper Strip Corrosion, Rating, ASTM D4048                         | 1B               |
| Rust, Rating, ASTM D1743   | Pass             |
| 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, mm <sup>2</sup> /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.aspx>

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You can always contact our Technical Help Desk engineers on Mobil lubricants and services related questions: <https://www.mobil.com/de/de-de/kontakt>

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](http://www.exxonmobil.com)

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