



## Spheerol EPL Range

Bearing grease

### Description

Castrol Spheerol™ EPL range of greases are lithium based products containing highly refined mineral oils and fortified with extreme pressure (EP) additives as well as corrosion and oxidation inhibitors. These greases have been formulated with additives that provide good film strength under medium to high loads.

### Application

The Spheerol EPL range are general purpose greases designed for plant wide lubrication. The range extends from a NLGI 2 for general purpose bearing lubrication to a NLGI 00 (see separate data sheet) semi-fluid grease suitable for centralised lubrication systems and grease filled gearboxes. These greases provide good protection against rust and corrosion as well as resistance to water wash-out; which makes them particularly suitable for equipment where moist or wet conditions are common.

### Advantages

- High mechanical stability – the grease keeps its consistency in service ensuring long lubricant life
- Good adhesion – continuous lubrication and reduced consumption as film stays between lubricated surfaces
- Good water resistance – the grease film remains on the surface even in the presence of water
- Resistant to copper and steel corrosion – helps prevent rust and oxidation on metal surfaces
- Excellent EP and anti-wear properties – protects equipment against extreme loading and helps minimise bearing component wear

## Typical Characteristics

| Name   | Method                  | Units              | EPL 0          | EPL 1          | EPL 2          |
|--|-------------------------|--------------------|----------------|----------------|----------------|
| Appearance   | Visual                  | -                  | Amber to Brown | Amber to Brown | Amber to Brown |
| Thickener type   | -                       | -                  | Lithium        | Lithium        | Lithium        |
| Base oil   | -                       | -                  | Mineral oil    | Mineral oil    | Mineral oil    |
| Consistency  | ISO 2137 / ASTM D217    | NLGI Grade         | 0              | 1              | 2              |
| Density @ 20°C / 68°F  | ASTM D4052 / DIN 51757D | kg/m <sup>3</sup>  | 0.89           | 0.895          | 0.9            |
| Worked Penetration (60 strokes @ 25°C / 77°F)                              | ISO 2137 / ASTM D217    | 0.1 mm             | 355-385        | 310-340        | 265-295        |
| Dropping point   | ISO 2176 / ASTM D566    | °C/°F              | 170/338        | 195/383        | 200/392        |
| Base Oil Viscosity @ 40°C / 104°F  | ISO 3104 / ASTM D445    | mm <sup>2</sup> /s | 150-200        | 150-200        | 150-200        |
| Rust Test (distilled water)  | ASTM D1743              | Pass               | Pass           | Pass           | Pass           |
| Copper Corrosion (24 hrs, 100°C / 212°F)                                   | ASTM D4048              | Rating             | 1b             | 1b             | 1b             |
| Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr) | ISO 51350 / ASTM D2266  | mm                 | 0.45           | 0.45           | 0.45           |
| Four Ball Weld Load test - Weld Point                                      | ISO 11008 / ASTM D2596  | kgf                | 200            | 250            | 250            |
| Water Wash-out @ 79°C / 175°F  | ISO 11009 / ASTM D1264  | % wt loss          | -              | 7              | 3.5            |
| Oxidation Stability - Rotating Pressure Vessel test aster 100 hrs          | ASTM D942 / DIN 51808   | pressure drop psi  | 6              | 6              | 6              |
| DIN Classification   | DIN 51502               | -                  | KP0K-20        | KP1K-20        | KP2K-20        |
| ISO Classification   | ISO 6743/9              | -                  | L-XCBEB<br>0   | L-XBCEB<br>1   | L-XBCEB<br>2   |

Subject to usual manufacturing tolerances.

## Additional Information

In order to minimise potential incompatibilities when converting to a new grease, all previous lubricant should be removed as much as possible prior to operation. During initial operation, relubrication intervals should be monitored closely to ensure all previous lubricant is purged.

Spheerol EPL Range

08 Aug 2012

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

[www.castrol.com/industrial](http://www.castrol.com/industrial)