

Balmerol[®] Supertec PD Grease

Maximum Pressure High Performance Grease

Technical Data Sheet

Product Description:

Balmerol Supertec PD greases are high performance lithium greases, incorporating high dosage of microflux surface improvement additives. Due to eutectic flow caused by the special additive package, this grease gives extremely smooth surfaces resulting in minimum wear and very low co-efficient of friction.

Features & Benefits:

Balmerol Supertec PD greases have good load bearing properties and provides adequate protection to the bearings. The other advantages / benefits of Supertec PD greases are:

- Very stable to shearing and oxidation – Extended regreasing intervals
- Provides superior protection against fatigue wear, abrasive wear and pitting or fretting corrosion with extension of equipment life
- Resistance to water wash out – Better bearing protection and lower grease consumption
- Reduce Energy consumption (low co-efficient of friction)
- Lead and Chlorine free – Less impact to the environment

Applications / Recommendations:

Balmerol Supertec PD greases are designed as multifunctional extreme pressure greases for prevention of wear, during usage at temperatures upto 120°C. Balmerol Supertec PD greases can be used in plain and antifriction bearings mainly for high speed applications.

- **Recommended Speed Factor**

Supertec PD 2 : NDm factor 900,000 *

Supertec PD 1 : NDm factor 1,000,000*

Supertec PD 0, 00, 000 : To be used mainly in gear boxes, couplings & homo-kinetic transmissions

* NDm factor is an approximate indication

$$\text{NDm} = \text{rpm} * ((\text{bearing bore} + \text{outside diameter}) / 2)$$

Balmerol® Supertec PD Grease

Maximum Pressure High Performance Grease

Technical Data Sheet

Typical Properties:

| Balmerol Supertec PD | | | | | |
|---|-----------------|----------------|---------------|---------------|---------------|
| Properties | Supertec PD 000 | Supertec PD 00 | Supertec PD 0 | Supertec PD 1 | Supertec PD 2 |
| NLGI Grade | 000 | 00 | 0 | 1 | 2 |
| Colour | Yellowish | Yellowish | Yellowish | Yellowish | Yellowish |
| Thickener Type | Lithium | Lithium | Lithium | Lithium | Lithium |
| Base Oil | Mineral | Mineral | Mineral | Mineral | Mineral |
| Worked Penetration 60/60 strokes at 25°C, ASTM D 217 | 445 - 475 | 400 - 430 | 355 - 385 | 310 - 340 | 265 - 295 |
| Prolonged Worked Penetration, difference after 100,000 strokes | < 30 | < 30 | < 30 | < 30 | < 30 |
| Dropping Point °C, ASTM D 566 | > 175 | > 180 | > 180 | > 190 | > 190 |
| Four Ball Weld Load, Kg, IP 239 | 250 | 250 | 250 | 250 | 250 |
| Four Ball Wear Scar Dia, mm, ASTM 2266 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Timken OK Load lb, ASTM D 2509 | - | 55 | 55 | 55 | 55 |
| Water Wash Out, % Loss @ 80°C max, ASTM D 1264 | - | - | - | < 8 | < 5 |
| Emcor Rust Protection Test, IP 220 | - | - | - | 0,0 | 0,0 |
| Oxidation Stability, Pressure drop kg/cm ² fter 100 hrs @ 99°C max, ASTM D 942 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |

Health and Safety:

Balmerol Supertec PD greases are not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. For MSDS please contact your local Balmer Lawrie Marketing / Technical Service team.

For Further Information, contact:

Balmer Lawrie & Co. Ltd.
SBU: Greases & Lubricants (G&L) Division
P- 43, Hide Road Extension
Kolkata: 700088
www.balmerlawrie.com