

Castrol Optitemp XBT1LF

Grease for thermally and mechanically highly loaded CV joints

Description

CASTROL OPTITEMP™ XBT 1 LF is a grease designed for extreme loads in all types of constant velocity joints. The fully synthetic product features excellent high and lowtemperature characteristics. Due to its special additives it ensures a reduced coefficient of friction which leads to fuel saving. The product further reduces the temperature in the joint and improves the noise and vibration behavior (NVH). The compatibility with conventional boot materials is excellent.

Application

- Application in homokinetic ball and tripod joints (free from MoS₂)
- Suited for joints in side shafts and high-speed joints in propeller shafts
- All types of vehicles where "Fuel Economy" is required
- Vehicles where the periodic axial forces in the joint have a direct influence on the driving comfort
- Joints subjected to high mechanical and thermal loads
- Application at extreme temperatures:
 - 40°C low temperature
 - 160°C permanent temperature (in CV joints)
 - 180°C maximum temperature (in CV joints)
- At high sliding friction components

Advantages

- OPTITEC™ - OPTIMOL technology
- wide range of applications
- extremely wide temperature range
- high service life, excellent wear behavior
- very low coefficients of friction
- extreme reduction of the axial forces in the joint
- good oxidation stability
- optimum boot compatibility with CR and HytreI
- "Fuel Economy" (in some cases up to 0.05 l / 100 km)
- significant lowering of the operating temperatures
- low evaporation losses

Typical Characteristics

| Test | Method | Unit | Value |
|--|------------------------|------------------------|--------------------------------------|
| CASTROL OPTITEMP | - | - | XBT 1 LF |
| Colour | visual | - | yellow/green |
| Base | - | - | polyurea / fully synthetic |
| Worked penetration Pw 60 | DIN ISO 2137 | 0.1 mm | 290 - 320 |
| Density at + 20°C/68°F | DIN 51757 | kg/m ³ | 890 |
| Base oil viscosity at + 40°C/+ 104°F at + 100°C/+ 212°F | DIN 51562 | mm ² /s | 259 28.7 |
| Dropping point | DIN ISO 2176 | °C °F | > 230 > 446 |
| Water resistance at + 90°C/+ 194°F | DIN 51807 T. 1 | - | 0 |
| Corrosion protection (SKF Emcor) | DIN 51802 | - | 0 |
| Flow pressure at + 20°C/ + 68°F at - 20°C/ - 4°F at - 35°C/ - 31°F | DIN 51805 | hPa | < 100 < 600 < 1600 |
| VW oil separation (1 h/90°C/+ 194°F) | - | % | < 5.0 |
| Seal compatibility: Inepsa CR 4012 (168h/100°C): Change in hardness Volume change Change in tensile strength Change in elongation | DIN 53505 DIN 53521 | Shore A % % % | ≤ - 20 ≤ + 20 ≤ - 10 ≤ - 20 |

1 mm²/s $\hat{=}$ 1cSt

Subject to usual manufacturing tolerances

Additional Information

CASTROL OPTITEMP BT 1 LF is compatible with the elastomers chloroprene rubber CR (e.g. Neopren™) and polyetherester rubber (e.g. Hytrel™).

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