



## Product Data

### Castrol Optitemp® XBT 1 LF

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 low-temperature 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 MoS<sub>2</sub>)
- 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 Hytrel
- "Fuel Economy" (in some cases up to 0.05 l / 100 km)
- Significant lowering of the operating temperatures
- Low evaporation losses

#### Characteristics

	Unit	Value	Test Method
<b>OPTITEMP</b>	-	<b>XBT 1 LF</b>	-
Article no.	-	08346	-
Color	-	yellow/green	visual
Base	-	polyurea/ fully synthetic	-
Worked penetration Pw 60	0.1 mm	290 - 320	DIN ISO 2137
Density @ 20°C/68°F	kg/m <sup>3</sup>	890	DIN 51757

Base oil viscosity @ 40°C/104°F @ 100°C/212°F	mm <sup>2</sup> /s	259 28.7	DIN 51562
Dropping point	°C °F	> 230 > 446	DIN ISO 2176
Water resistance @ 90°C/194°F	-	0	DIN 51807 T. 1
Corrosion protection (SKF Emcor)	-	0	DIN 51802
Flow pressure @ 20°C/ 68°F @ - 20°C/ - 4°F @ - 35°C/ - 31°F	hPa	< 100 < 600 ≤ 1600	DIN 51805
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	Shore A % % %	≤ - 20 ≤ + 20 ≤ - 10 ≤ - 20	DIN 53505 DIN 53521

1 mm<sup>2</sup>/s  $\triangleq$  1cSt. These technical data are based on average test results. Minor deviations may occur from case to case. Above data are based on extensive tests and practical experience. Considering the wide range of application requirements, they cannot, however, guarantee success in every single case. We therefore recommend practical trials. We reserve the right to change the product composition with a view to further improvement.

Health, safety and environmental information are provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products. Castrol will not accept liability if the product is used other than in the manner or with the precautions or for the purpose(s) specified. Before using the product other than directed, please contact Castrol for consultation.

## Additional Information

### User Advice

Optitemp XBT 1 LF is compatible with the elastomers chloroprene rubber CR (e.g. Neopren®) and polyetherester rubber (e.g. Hytrei®).

Castrol Optitemp XBT 1 LF  
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