

## Optitemp HT 1 LF

Grease for CV joints subjected to extremely high thermal and mechanical loads

### Description

Castrol OPTITEMP™ HT 1 LF is a grease designed for the most extreme loads in constant velocity ball joints. It displays excellent high and low temperature behavior and due to its special additives provides a reduction of the coefficient of friction resulting in reduced fuel consumption and lowered temperatures in the joints. It is also recommended for the application with ventilated boots due to extremely low evaporation losses. The compatibility with boots made of commonly used materials is very good.

### Application

- Application in homokinetic ball joints
- Vehicles which require fuel economy
- Joints subjected to extremely high mechanical and thermal loads
- Application at extreme temperatures (possible down to - 45°C/- 49°F):
  - - 160°C/320°F permanent temperature application
    - 180°C/356°F maximum temperature application

### Advantages

- wide temperature range
- long service life
- extremely low coefficients of friction
- very good oxidation stability
- optimum boot compatibility with CR and Hytrel
- fuel economy (in extreme cases up to 0.15 l / 100 km) compared to Castrol mineral CVJ grease
- lowering of joint temperatures generated by friction

## Typical Characteristics

Name	Method	Units	Optitemp HT 1 LF
Appearance	Visual	-	homogeneous
Colour	Visual	-	grey
Dropping Point, Grease	DIN-ISO 2176 09-81	°C	> 230
Penetration grease @ 25C, 60cycles	DIN-ISO 2137 12.81	1/10 mm	310
Evaporation loss (48h/160 °C)	DIN 58397-1	%	8.7
Oil Separation (Greases) 168h 40°C	DIN 51817- 04/ 71	% wt	< 5.0
Water Resistance (Greases) 3h 90°C	DIN 51807	Assessment Stage	0
Density of Pasty Lubes	CIP 19	kg/m3	905
Oil Separation Centrifuge @ 90°C	P-VW 1423	-	2,8
Infra Red (IR)	DIN 51451	-	Reference
Copper Corrosion, 24hrs @ 100C	DIN 51811	-	1B
Worked Stability after 100,000 Strokes	DIN ISO 2137	0.1mm	28
Oil separation, 24 hrs @100°C	FTM 791-321	% wt	3.8
Flow Pressure (Grease) 20°C	DIN 51805 08/74	mbar	83
Flow Pressure (Greases) -35°C	DIN 51805	mbar	1000
Rust Prevention, grease (Emcor)	DIN 51802	Corrosion rating	0/0
Elastomer Inepsa CR 4012, Hardness Change 168h at 100°C	DIN 53505	Shore A	3
Elastomer Inepsa CR 4012, Vol. Change 168h at 100°C	DIN 53521	% vol	- 5
High temperature stability (100h/100 °C)	CIP 27	0.1mm	-12

Subject to usual manufacturing tolerances

## Additional Information

Castrol OPTITEMP HT 1 LF is generally compatible with the elastomers chloroprene rubber (CR) and polyetherester rubber (Hytrel). To be checked before use.

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