

**Product Data** 

# **Optitemp HT 1LF NG**

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

## **Description**

Castrol OPTITEMP™ HT 1 LF NG 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 (down to 45°C/- 49°F is possible):
  - o 160°C/320°F permanent temperature application
  - o 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 I / 100 km) compared to Castrol mineral CVJ grease
- Lowering of joint temperatures generated by friction

### **Typical Characteristics**

Name	Method	Units	Optitemp HT 1LF NG
Colour	Visual	-	black
Base Oil	-	-	Synthetic
Thickner type			Polyurea
Worked Penetration (60 strokes @ 25°C / 77°F)	ISO 2137 / ASTM D217	0.1 mm	310
Density @ 20°C / 68°F	ASTM D4052	kg/m³	890
Base Oil Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm²/s	303
Dropping point	ISO 2176 / ASTM D566	°C/°F	>230/>446
Water Resistance	DIN 51807-1	Rating	0
Rust Test - EMCOR (distilled water)	ISO 11007 / ASTM D6138	Rating	0
Flow pressure @ 20°C / 68°F	DIN 51805	mBar	85
Flow pressure @ -20°C / -4°F	DIN 51805	mBar	350
Flow pressure @ -35°C / 31°F	DIN 51805	mBar	1000
VW Oil Separation test (1 hr @ 90°C / 194°F)	P-VW-1423	% wt	<4.0
Elastomer Compatibility - with Inepsa CR 4012 (168 hrs @ 100°C / 212°F)	ISO 1817	change in shore hardness / volume change (%)	4/-4

Subject to usual manufacturing tolerances

#### **Additional Information**

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

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

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