



Product Data

## 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 which has been designed for the most extreme loads in constant velocity ball joints. It features excellent high and low temperature behavior and due to its special additives guarantees 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
  - 45°C/- 49°F low temperature application
  - 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)
- Lowering of joint temperatures generated by friction
- Extraordinarily low evaporation losses

## Typical Physical Characteristics

Test	Method	Unit	Value
CASTROL OPTITEMP	-	-	HT 1 LF
Colour	visual	-	grey-green
Base	-	-	polyurea/fully synthetic
Worked penetration Pw 60	DIN ISO 2137	0.1 mm	310
Density at + 20°C/+ 68°F	DIN 51757	kg/m <sup>3</sup>	890
Base oil viscosity at + 40°C/+ 104°F	DIN 51562	mm <sup>2</sup> /s	303
Dropping point	DIN ISO 2176	°C	> 230
		°F	> 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	mbar	85
			350
			1400
VW oil separation (1h/+ 90°C/+ 194°F)	-	%	< 4.0
Seal compatibility: Inepsa CR 4012 (168h/+ 100°C/+212°F):	DIN 53505 DIN 53521	Shore	+ 4 - 4
Change in hardness		%	
Change in volume			

1 mm<sup>2</sup>/s  $\hat{=}$  1cSt

## Additional Information

CASTROL OPTITEMP HT 1 LF is compatible with the elastomers chloroprene rubber (CR) and polyetherester rubber (Hytrel)

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