



**Product Data**

## **Alphasyn OG**

Synthetic Gear Oil

### **Description**

Castrol Alphasyn™ OG 6800 is a heavy-duty, specially high viscosity lubricant primarily intended for use in heavily loaded, low-speed gears and bearings where boundary lubrication conditions may prevail. Formulated from wax-free synthetic base stocks which have exceptional thermal oxidation properties and excellent low temperature fluidity. The combination of a naturally high viscosity index and a unique additive system enables OG 6800 to provide outstanding performance under severe high and low temperature operating conditions.

The base stocks have inherently low traction properties which result in low fluid friction in the load zone of non-conforming surfaces such as gears. Reduced fluid friction produces lower oil operating temperatures and improved gear efficiency.

Alphasyn OG 6800 does not contain solvents.

### **Application**

Alphasyn OG 6800 is especially designed for use in both newer and retrofitted enclosed system designs and is recommended for all kinds of enclosed gears as well as plain and roller bearing elements.

OG 6800 also provides excellent protection to gears and bearings under Elastohydrodynamic and Boundary lubrication conditions.

### **Advantages**

- Extended gear life resulting from outstanding loadcarrying, antiwear and tackiness properties derived from proprietary thick film lubrication.
- Improved gear efficiency and lower operating temperatures arising from low traction properties.
- Reduced lubricant consumption and disposal costs Improved safety through absence of solvent.

## Typical Characteristics

Name	Method	Units	OG 6800
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	7200
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	345
Viscosity Index	ISO 2909 / ASTM D2270	-	185
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	900
Pour Point	ISO 3016 / ASTM D97	°C/°F	-18/5
Flash Point - open cup method	ISO 2592 / ASTM D92		219/427
Rust test - distilled water (24 hrs)	ISO 7120 / ASTM D665A	-	Pass
Copper corrosion (3 hrs@100°C/212°F)	ISO 2160 / ASTM D130	Rating	1b
Timken OK Load test	ASTM D2782	kg / lb	32/70
Four Ball Weld Load test - Weld Point	ISO 11008 / ASTM D2596	kgf	220
Four Ball Wear test - Wear Scar Diameter (40 kgf / 75°C / 1200 rpm / 1 hr)	ASTM D2266	mm	0.36
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	>12

Subject to usual manufacturing tolerances

Alphasyn OG  
 15 Sep 2022  
 Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

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

<http://msdspds.castrol.com>