



## SAPPHIRE HI-TORQUE (with SUPS)

High performance, semi-synthetic gearbox fluids.  
A range of thermally stable EP gearbox lubricants with the unique Start Up Protection System that protects on start up as well as during use.

*Viscosity grades: ISO VG 100, 220, 320, 460, 680*

### FEATURES

- Ø Temperature range  $-20^{\circ}\text{C}$  to  $120^{\circ}\text{C}$
- Ø Outstanding EP performance (560kg weld load)
- Ø Unique SUPS Start Up Protection System
- Ø High thermal stability
- Ø Excellent corrosion protection
- Ø Low foaming

### DIRECTIONS FOR USE

- Ø For optimum performance drain & flush prior to filling with ROCOL

### Technical and Safety Data Sheets are available from:

**Fax Back Facility** : +44 (0)113 232 2770  
**Web Site** : [www.ocol.com](http://www.ocol.com)  
**Customer Service** : +44 (0)113 232 2700

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#### **ROCOL Lubricants**

ROCOL House, Swillington, Leeds LS26 8BS, England.

Tel: +44 (0)113 232 2600 Fax: +44 (0)113 232 2760

[www.ocol.com](http://www.ocol.com)

[www.ocolshop.com](http://www.ocolshop.com)

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The information in this publication is based on our experience and reports from customers.  
There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility.

TECHNICAL DATA



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## TECHNICAL DATA (typical values)

Appearance	Blue fluid
Base type	Semi-synthetic
viscosities at 40°C	
Sapphire Hi-Torque 100	100 cSt
Sapphire Hi-Torque 220	220 cSt
Sapphire Hi-Torque 320	320 cSt
Sapphire Hi-Torque 460	460 cSt
Sapphire Hi-Torque 680	680 cSt
Temperature range	-20°C to 120°C
Shell 4 ball (IP 239)(ASTM D2596)	
Weld load	560 kg
Sapphire Hi-Torque meets the requirements of:	
United States Steel 224	
American Gear Manufacturers Association (AGMA) 250.04.	
Deutsche Industrie Norm (DIN) 51517 part 3	
David Brown S1.53.101.	
Storage	Storage temperature should be controlled to between 1 and 40 °C.
Pack sizes	5 ltr, 20 ltr, 200 ltr

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