



## Alpha EP range

Industrial Gear oil

### Description

The Castrol Alpha EP range fulfils the requirements of DIN 51517-3 for CLP type gear oils and U.S. Steel 224 performance. The Castrol Alpha EP range offer good wear protection, safety against scuffing, aging resistance and a high thermal endurance. In addition, the products behave neutral towards conventional seals and bearing metals.

### Application

The Castrol Alpha EP range offers good gear performance for most types of gears. The Castrol Alpha EP range is also suitable for mechanical-hydrodynamic transmissions, turbo clutches and hydraulics

### Typical Characteristics

Name	Method	Units	EP32	EP46	EP68	EP100	EP150	EP220	EP320	EP460	EP680
Density @ 15°C/59°F	ISO 12185/ ASTM D4052/ DIN 51757	g/ml	0.87	0.88	0.88	0.88	0.88	0.88	0.89	0.90	0.91
Viscosity, Kinematic 40°C/104°F	ISO 3104/ ASTM D445/ DIN 51562	mm <sup>2</sup> /s	32	46	68	100	150	220	320	460	680
Viscosity, Kinematic 100°C/212°F	ISO 3104/ ASTM D445/ DIN 51562	mm <sup>2</sup> /s	5.4	6.7	8.8	11.0	14.5	18.8	24.4	30.5	35.0
Viscosity Index	ISO 2909/ ASTM 2270/ DIN ISO 2909	None	>95	>95	>95	>95	>95	>95	>95	>95	82
Pour Point	ISO 3016/ ASTM D97/ DIN-ISO 3016	°C/°F	-30/ -22	-27/ -17	-24/ -11	-21/ -6	-18/ -0.4	-15/ 5	-15/ 5	-12/10	-12/ 10
Flash Point, COC	ISO 2592/ ASTM D92/ DIN-ISO 2592	°C/°F	215/ 419	215/ 419	215/ 420	226/ 440	232/ 450	232/ 450	232/ 450	232/450	232/ 450

Name	Method	Units	EP32	EP46	EP68	EP100	EP150	EP220	EP320	EP460	EP680
Rust Test ( 24 hrs Synthetic sea water)	ISO 7210/ ASTM D665B/ DIN ISO 7120	-	0	0	0	0	0	0	0	0	0
Copper Corrosion (3 hrs @ 100°C/212°F)	ISO 2160/ ASTM D130/ DIN EN ISO 2160	-	1	1	1	1	1	1	1	1	1
FZG Test ( A/8.3/90 )	DIN 51354-2	-	>=12		>=12	> 14	> 14	> 14	> 14	> 14	> 14

Subject to usual manufacturing tolerances.

Alpha EP range  
06 May 2011  
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. Material 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

[www.castrol.com/industrial](http://www.castrol.com/industrial)