



## Product Data

# Castrol Alpha SP 680™ Gear Oil

## Description

Castrol Alpha SP product range are premium quality extreme pressure type industrial gear lubricants meeting most demanding requirements of new generation gear drives of heavy industrial machinery. These oils are blended from solvent refined base stocks with specially selected sulphur phosphorous type additive package to impart extreme pressure and anti wear characteristics. The product range have excellent thermal stability, low foaming and good demulsibility characteristics.

## Application

Castrol Alpha SP gear oils are designed to meet lubrication requirements of enclosed gear drives of industrial machinery working under heavy to shock load conditions. These oils can also be used for lubrication of chain drives, sprockets, flexible couplings, plain and roller bearings.

The recommended maximum bulk fluid temperature is approximately 100 - 110°C. However continuous operation at this temperature may reduce service life of the oil. The products are not recommended for gear drives with brass / bronze components.

## Advantages

Product Feature	Operational Advantage	Customer Benefit
Selected Extreme Pressure additive Package	Minimal gear tooth wear even under heavy and shock load conditions	Extended gear life
High anti-oxidation Characteristics	Reduced oil thickening even on continuous operation at elevated temperature.	Increased oil change period
Corrosion inhibition	Rust and corrosion protection of components even during idling period.	Extended gear life
Superior demulsibility characteristics	Immediate water separation in event of leakage/ contamination; trouble free operating even in high humidity environment.	Total gear protection even in presence of water
Anti-foam	No foam build up even in system of gears	Smooth operation high pressure lubrication

Castrol Alpha SP 680  
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### Performance Levels

*Castrol Alpha SP product range have been formulated to exceed following stringent international specifications.*

- ◆ AGMA 250.04 - 5 EP
- ◆ Cincinnati Milacron P-63, P-77, P-59 & P-35
- ◆ US Steel - No. 224
- ◆ David Brown ET 33/80-5 EP
- ◆ DIN 51517 Part 3
- ◆ BIS: 8406-1985
- ◆ IPSS: 1-09-003

### Manufacturer's Approvals

*Castrol Alpha SP grades are recommended by leading gear box manufacturers eg.*

- ◆ David Brown Gear Industries (Pty) Ltd
- ◆ PfeifferAG
- ◆ Maschinenfabrik Gustav
- ◆ Mannesmann Demag
- ◆ Krupp Industrietechnik GmbH
- ◆ Renk
- ◆ Dorr-Oliver GmbH
- ◆ Stork Remu SpA

### Characteristics

Characteristics	Typical Value
ISO VG No.	680
Kin. Viscosity@ 40°C cst	615-740
Viscosity Index.	90
Flash Point °C, COC	220
Pour Point. °C	-6
Rust Prev. Characteristics	Pass

*These are typical figures and do not constitute a specification.*

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