



## Alpha SP Range

Extreme pressure gear oil

### Description

The Castrol Alpha SP range are high quality mineral extreme pressure gear lubricants. They are formulated using high quality mineral base oils which are fortified with a sulphur-phosphorous additive system to prevent scuffing in heavily loaded applications. The balanced formulation separates water rapidly and resists foaming ensuring optimum film strength at the point of contact. The range can be used in splash lubricated or forced circulation systems

### Application

- Spur, bevel, spiral bevel and planetary gearboxes
- Pump bearings
- Crankcase lubricant for high pressure mud or cement pumps

### Approval Status

Alpha SP is classified as follows:

- DIN Classification is CLP.
- American Gear Manufacturers Association (AGMA) EP Classification.

Alpha SP grades meet the requirements of:

- DIN 51517 Part 3.
- AGMA 9005 - D94
- US Steel 224.
- David Brown Type E.
- Hansen Transmissions.
- Flender.

### Features and Benefits

Castrol Alpha SP gear oils are formulated to give a high level of load carrying performance together with other characteristics giving long life and tolerance towards contaminants in a harsh operating environment:-

- Excellent thermal stability and oxidation resistance.
- Good water resistance and demulsification characteristics.
- Protection of iron and bronze components against corrosion.

## Technical Data

Name	Method	Units	Alpha SP 68	Alpha SP 100	Alpha SP 150	Alpha SP 220	Alpha SP 320	Alpha SP 460	Alpha SP 680
ISO Viscosity Grade			68	100	150	220	320	460	680
Kinematic Viscosity at 40°C	ASTM D445	mm <sup>2</sup> /s	68.0	100	150	220	320	460	680
Kinematic Viscosity at 100°C	ASTM D445	mm <sup>2</sup> /s	8.53	11.1	14.5	18.7	24.0	30.5	37.3
Viscosity Index	ASTM D2270		95	95	95	95	95	95	85
David Brown & AGMA Designation			2EP	3EP	4EP	5EP	6EP	7EP	8EP
Pour Point	ASTM D97	°C	-21	-21	-18	-18	-15	-12	-9
Open Flash Point		°C	220	220	220	226	226	226	230
Foam Sequence I, Tendency	ASTM D892	ml	10	10	10	10	10	10	10
Foam Sequence I, Stability	ASTM D892	ml	0	0	0	0	0	0	0
FZG Gear Test ( A/ 8.3/90 )	DIN 51354	FLS	>12	>12	>12	>12	>12	>12	>12
Timken OK Load		lbs				70	70	70	70
Rust Prevention - Sea Water	IP 135B	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

## Care and Handling

Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

## Packaging and Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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