

Product Data

ZIE GEAR SYNTH Fully Synthetic Gear Oil

Description:

Ziel Gear Synth series gear oils are fully synthetic heavy duty industrial gear oils designed to provide outstanding protection of gears and bearing, extended oil life even under harsh conditions, helping to enable problem-free operation of equipment. They are formulated from fully synthetic base fluids that have exceptional oxidation and thermal resistance properties and excellent low temperature fluidity. The high viscosity index of these oils minimise less changes in viscosity with respect to changes in temperature, enabling wider operating temperature range and improved low temperature flow-ability. Advance additive technology used in the formulation to resist scuffing wear and high level of resistance against micro pitting fatigue.

Features:

- Excellent load carrying capacity and anti-wear properties
- Unique anti-micro-pitting ability for gear sets, reducing the risk of premature damage
- Outstanding thermal property, reduce the formation of oxides at high temperatures. Excellent protection of the gear under severe high or cold temperatures.
- Excellent seal compatibility
- Excellent resistance to corrosion and rust, and very good demulsibility.

Performance Level:

Meets the requirement of

- DIN 51517 Part III
- ISO 12925-1 Type CKC/CKD
- AGMA EP 9005-EO2 (EP)
- AISE (US STEEL) : 224
- David Brown S1.53.101
- FLENDER GEAR BOXES – REVISION 9

Applications:

Ziel Gear Synth series is suitable for lubrication of spur gear, helical gear, bevel gear and bearing of industrial equipment and ship with heavy load and impact load under harsh environment temperature; recommended for applications requiring long service life, little maintenance or very difficult maintenance system. These gear oils are widely applied in steel, cement, coal, Power, petrochemical and papermaking areas, such as the reduction gearbox of conveyor, coal mill, extruder, blender mixer and other heavy equipment industry gearbox. Also suitable for marine propeller, deck winch, crane, steering gear, etc.; the reducer of excavator, dragline, electric-wheeled self-dumping trucks and other equipment in the open-pit coal mine.

Typical characteristics:

ZIEL GEAR SYNTH ISO VG GRADE ->	150	220	320	460	680
Appearance	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright
Kinematic Viscosity, @40°C, ASTM D445, cSt.	150	220	320	460	680
Kinematic Viscosity, @100°C, ASTM D445, cSt.	22.2	30.4	40.6	54.1	75.5
Viscosity Index, ASTM D2270, Min.	150	154	160	164	168
Flash Point, (COC), °C, ASTM D92, Min,	240	240	250	250	250
Pour Point, °C, ASTM D97, Max.	-45	-39	-33	-27	-27
Total Acid Number, mg KOH/g, ASTM D 664	0.9	0.9	0.9	0.9	0.9
4 Ball EP Test, kgf, Weld Load ASTM D 2783	≥260	≥260	≥260	≥260	≥260
Scar Wear Diameter, 1h/40kg., IP-239, mm.	0.3	0.3	0.3	0.3	0.3
FZG Micro pitting, Fail Stage, Rating, FVA 54	10/high	10/high	10/high	10/high	10/high
Copper Corrosion, 3H @121°C, ASTM D130	1b	1b	1b	1b	1b
FZG scuffing test, fail load stage A/8.3/90, ASTM D51354-2	>12	>12	>12	>12	>12
Rust Protection, ASTM D665, Sea Water	Pass	Pass	Pass	Pass	Pass
Demulsibility of EP Oils, Free Water, ml, ASTM D 2711	88	87	85	84	87
Foaming Characteristics, ASTM D892, Seq. II, Tendency/Stability, ml/ml	0/0	0/0	0/0	0/0	0/0

The above figures are typical figures with normal production tolerance.

Health & Safety

These oils are unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained.

All reasonable care has been taken to ensure that the information contained in this publication is accurate as at the date of printing. It should be noted however that the information above may be affected by changes occurring subsequent to the date of printing in the blend formulation or methods of application of any of the products referred to or in the requirements of any specification approval relating to any such products.