

NS GEAR Series

ISO VG 68/100/150/220/320/460/680 - Industrial EP Gear Oil - DIN 51517-3 CLP
SKU: xxxxxx

PRODUCT OVERVIEW

The NS Gear Series are extreme-pressure industrial gear oils for enclosed gear drives operating under heavy and shock loading. A lead-free sulphur-phosphorus additive system builds a durable film on tooth flanks, protecting against scuffing, pitting and surface distress under shock loading. Highly refined base oils deliver thermal and oxidation stability, rapid water separation and clean operation, extending both oil life and gearbox service intervals.

APPLICATIONS

Recommended for enclosed industrial gear drives - spur, helical, bevel and spiral bevel - lubricated by splash, bath or circulation, in marine machinery, mining, steel, cement, paper and general plant service. Also suitable for heavily loaded plain and rolling bearings. Also meets US Steel 224, David Brown S1.53.101 and Fives Cincinnati P-63 (68), P-76 (100), P-77 (150), P-74 (220), P-59 (320), P-35 (460), P-34 (680). Not recommended for worm gears with bronze components.

SPECIFICATIONS Meets or exceeds: **DIN 51517-3 CLP | ISO 12925-1 CKD | AGMA 9005-F16 EP**

CHARACTERISTICS*

PROPERTY	TEST METHOD	68	100	150	220	320	460	680
Density at 15°C, g/cm ³	ASTM D4052	0.884	0.886	0.892	0.893	0.898	0.898	0.905
Kinematic Viscosity @ 40°C, cSt	ASTM D445	68	100	150	220	320	460	680
Kinematic Viscosity @ 100°C, cSt	ASTM D445	8.7	11.2	14.8	19.0	24.4	30.6	39.3
Viscosity Index	ASTM D2270	99	98	97	97	97	96	93
Flash Point (COC), °C	ASTM D92	230	235	240	245	255	260	285
Pour Point, °C	ASTM D97	-24	-22	-21	-18	-15	-15	-12

*The specifications above are for illustrative purposes and communicated for information only.

PROPERTIES & BENEFITS

Load Carrying Capacity

A sulphur-phosphorus EP system maintains film strength on tooth flanks under heavy and shock loading.

Micropitting Resistance

A durable boundary film limits surface fatigue and grey staining on hardened and ground gear teeth.

Thermal Stability

High oxidation resistance limits sludge and deposits at high bulk oil temperatures, extending drain intervals.

Water Separation

Strong demulsibility sheds water quickly, protecting against rust and preserving EP performance.

Seal Compatibility

Neutral towards common seal materials, paints and bearing metals, reducing leakage and seal failure.

Lead-Free Chemistry

A lead-free additive system meets current environmental and disposal requirements without loss of EP performance.