



## NATIONAL™ EP SYNTHETIC GEAR OILS

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### Product Description

NATIONAL EP SYNTHETIC GEAR OILS are high quality industrial EP lubricants especially formulated to provide exceptional load carrying and anti-wear properties; protection against rust, corrosion, foaming, oxidation, as well as, extremely low coefficients of friction and traction. These lubricants prevent low cycle tooth surface damage (micropitting or gray staining) and have an excellent demulsibility.

Our advanced formulation, combines synthetic esters with PAO (Poly-Alpha-Olefins) and the most advanced additive technology, possess high shear stability even under heavy loaded high speed conditions. The low pour point and outstanding low temperature fluidity of our gear oils provide excellent lubrication during startup at sub-zero temperatures; while their exceptional viscosity-temperature characteristics provide dependable lubrication at high temperatures.

### Industry and OEM<sup>2</sup> Specifications

- Fives Cincinnati (MAG): P-77, P-74, P-59
- SEW IG CLP HC, SEW SG CLP HC
- Siemens AG
- US Steel 224, ISO 12925-1 CKD
- DIN 51517 (Part 3)
- AGMA 9005-E02

### Applications

NATIONAL EP SYNTHETIC GEAR OILS are recommended for almost any type of enclosed gear and plain and rolling bearings applications especially those running at continuously hot temperatures (up to 105°C) or exposed to extremely cold temperatures or under severe service conditions such as low speeds or heavy loads.

The product described above is designed for a specific use and may not be valid for other uses not specified in our specification sheet or in applications not requiring this specific product. Pinnacle Oil believes the information presented in this specification is accurate at the time written and is based upon internally generated information and information as presented by its vendors. No representation, warranty, or guarantee is made as to its accuracy or completeness. We do not accept any liability for any loss or damage that may occur from the use of this information.

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**NATIONAL™ EP SYNTHETIC GEAR OILS****Features**

- With its high VI, promotes an increase in the oil film thickness and better anti-wear protection at higher operating temperatures
- Longer drain intervals than mineral oils, means fewer oil changes, reduced maintenance costs, and less used oil disposal.
- Reduces wear and controls micropitting
- Ideal for heavily loaded low speed gears and bearings where boundary or elasto-hydrodynamic lubrication (EHL) conditions exist, such as in mine hoist gear reducers
- Compatible with most mineral oil based industrial EP/R&O gear lubricants

**Technical Data**

(typical values)

ISO GRADE		150	220	320
Product Number		07-526150	07-526220	07-526320
SDS Number		S016	S016	S016
Viscosity @ 40°C, cSt	D445	156.5	220	322.1
Viscosity @ 100°C, cSt	D445	21.1	27.59	37.1
Viscosity Index	D2270	159	162	164
API Gravity at 60°F	D1250	32.8	32.7	32.5
Pour Point, °C	D5950	-36	-33	-30
Color ASTM	D1500	L0.5	L0.5	L0.5
Demulsibility	D1401	40-37-3, 13'	40-40-0, 8'	40-40-0, 15'
Flash Point, °C	D92	220	230	230
Copper Corrosion	D130	1b	1b	1b
Rust Prevention	D665B	Pass	Pass	Pass
Four Ball Weld, Kgf	D2783	315	315	315
Four Ball Wear, mm	D2783	0.255	0.265	0.257

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