



# Pinnacle® EP

High performance synthetic extreme pressure gear lubricant

Product Data Sheet

## Product description

Pinnacle EP are a range of high performance synthetic extreme pressure (EP) gear lubricants. They are designed for use in a wide range of industrial gear applications and centralised lubrication systems, where severe conditions such as heavy load, high temperatures and shock load conditions are present.

Pinnacle EP lubricants are formulated with a combination of polyalphaolefin and synthetic ester base fluids and a range of advanced additives designed to offer robust EP protection, resist wear, corrosion, rust and promote reliable thermal and oxidation stability. These products are available in ISO VG 150, 220, 320, 460 and 680 grades.

## Customer benefits

- High performance thermal and oxidation stability offers reliable keep-clean protection and uptime in gear and circulating systems
- EP additive system promotes gear and bearing wear protection and extended equipment life during severe heavy duty operations
- Dependable rust and corrosion additive protection contributes to reduced system maintenance and service downtime
- Rapid water and air separation helps maintain continuous oil film protection and critical wear resistance in vulnerable components
- High temperature oxidation protection promotes extended lubricant service life, performance and system uptime
- Compatible with a range of conventional sealing materials and mineral oils, helping avoid oil changes and downtime

## Applications

- A wide range of gear systems in mobile and stationary industrial equipment where an EP lubricant is specified, including spur, bevel and worm gears
- Plain and anti-friction bearings subjected to heavy-duty operating conditions
- Circulating oil systems where an EP lubricant is required

## Product highlights:

- Reliable keep-clean system performance
- Severe service EP gear and bearing wear protection
- Rust and corrosion resistance
- Rapid water and air separation
- Extended lubricant service life and performance
- Selected specification standards include:
  - ANSI/AGMA
  - David Brown
  - DIN
  - Staubli
  - US Steel

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- Machinery exposed to the environment and wide ambient temperature conditions, such as crane, hoist and winch gearboxes
- Speed reducers, chain drives, sprockets and flexible couplings
- Bath, splash, circulating and spray lubrication systems

## Approvals, performance and recommendations

### Approvals

- Staubli textile machines

### Performance

- ANSI/AGMA Standard 9005-E02
- DIN 51517 Part 3 CLP
- David Brown Table H approval
- US Steel Specification No. 224

## Typical test data

PINNACLE EP				
TEST	TEST METHODS	RESULTS		
Viscosity Grade		150	220	320
Product Code		530485	530486	530487
Visc. Kinematic at 40°C	ISO 3104	150	220	320
Visc. Kinematic at 100°C	ISO 3104	18.8	26.1	35.2
Visc. Index	ISO 2909	150	154	159
Flash Point, COC, °C	ISO 2592	244	234	240
Pour point, °C	ISO 3016	-48	-48	-42
Density at 15 °C, Kg/l	ASTM D1298	0.850	0.853	0.855
FZG Damaged Load, A/16.6/90	DIN 51354	>12	>12	>12
FZG Damaged Load, A/8.3/90	DIN 51354	>12	>12	>12



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continued

## Typical test data

PINNACLE EP TEST	TEST METHODS	RESULTS	
Viscosity Grade		460	680
Product Code		530488	530489
Visc. Kinematic at 40°C	ISO 3104	460	680
Visc. Kinematic at 100°C	ISO 3104	46.5	62.5
Visc. Index	ISO 2909	163	168
Flash Point, COC, °C	ISO 2592	246	246
Pour point, °C	ISO 3016	-39	-36
Density at 15 °C, Kg/l	ASTM D1298	0.856	0.858
FZG Damaged Load, A/16.6/90	DIN 51354	>12	>12
FZG Damaged Load, A/8.3/90	DIN 51354	>12	>12

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

**Disclaimer** Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheet's.

**Health, safety, storage and environmental** Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDS's are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

For more information, go to [www.chevronlubricants.com](http://www.chevronlubricants.com)