



Pinnacle[®] EP

High performance synthetic extreme pressure gear lubricant

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 and 460 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

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	

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
- 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-EO2
- DIN 51517 Part 3 CLP
- David Brown Table H approval
- US Steel Specification No. 224

Typical test data			
Test	Test methods	Results	
Viscosity Grade		150	220
Product Code		002082.1	002083.1
Visc. Kinematic at 40°C	ISO 3104	150	220
Visc. Kinematic at 100°C	ISO 3104	18.8	26.1
Visc. Index	ISO 2909	150	154
Flash Point, COC, °C	ISO 2592	244	234
Pour point, °C	ISO 3016	-48	-48
Density at 15°C, Kg/l	ASTM D1298	0.850	0.853
FZG Damaged Load, A/16.6/90	DIN 51354	>12	>12
FZG Damaged Load, A/8.3/90	DIN 51354	>12	>12

Typical test data			
Test	Test methods	Results	
Viscosity Grade		320	460
Product Code		002081.1	002084.1
Visc. Kinematic at 40°C	ISO 3104	320	460
Visc. Kinematic at 100°C	ISO 3104	35.2	46.5
Visc. Index	ISO 2909	159	163
Flash Point, COC, °C	ISO 2592	240	246
Pour point, °C	ISO 3016	-42	-39
Density at 15°C, Kg/l	ASTM D1298	0.855	0.856
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 Sheets.

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). MSDSs 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.

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