



# BP Enersyn EP-XF

Synthetic Industrial EP Gear Oil

## Description

The BP Enersyn™ EP-XF gear oil range of high quality synthetic lubricants are based on polyalpha-olefin (PAO) fluids and sulphur/phosphorus Extreme Pressure (EP) additive technology providing outstanding thermal stability and high load carrying capacity.

## Application

The Enersyn EP-XF range has been formulated for use in all types of enclosed gears including heavy loaded / shock-loaded gears and bearings where EP properties are required. They are suitable for use in gearboxes where micro-pitting resistance is required and for a wide range of applications in extreme environments, for example Mining & Quarrying, Marine applications and Paper production.

The use of a PAO basestock provides inherently high Viscosity Index (VI) and low pour points making these products suitable for use over a wide temperature range.

The BP Enersyn EP-XF range is fully compatible with nitrile, silicone and fluropolymer seal materials.

Enersyn EP-XF is classified as follows:  
DIN Classification is CLP

Enersyn EP-XF grades meet the requirements of:  
DIN 51517 Part 3  
AGMA 9005 - D94  
US Steel 224  
David Brown Type E  
Hansen Transmissions  
Flender  
Lohmann & Stofferfoht

## Advantages

- Full EP performance\* gives maximum protection of gears against wear and shock loading, including protection against micropitting.
- Good thermal and oxidative stability provides reliable operation and extended operating life when compared to mineral oil based products.
- High corrosion protection for gears.
- Inherently high viscosity index makes the product suitable for operations operating over a wide temperature range.
- Rapid air release and good performance in the Flender Foam Test prevents foaming and bearing damage.
- Good water separation and demulsification characteristics means reduced down time through prolonged lubricant life and increased equipment reliability.
- PAO based lubricant provides good compatibility with seals, paints and mineral oil based lubricants.

\* ISO 320 grade achieved FZG >14 rating under A16.6/90 (double speed) test conditions

## Typical Characteristics

Test	Method	Units	150	220	320	460
Density @ 15°C	ISO 12185 / ASTM D4052	g/ml	0.86	0.86	0.86	0.87
K.V. @ 40°C	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	150	220	320	460
K.V. @ 100°C	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	18	25	33	45
Viscosity Index	ISO 2909 / ASTM 2270	-	140	140	140	140
Pour Point	ISO 3016 / ASTM D97	°C	-48	-42	-36	-36
Flash Point, PMC	ISO 2719 / ASTM D92	°C	220	220	230	230
Foam Seq I	ISO 6247 / ASTM D892	mls	0/0	0/0	0/0	0/0
Rust Test (24 hrs synthetic sea water)	ISO / 7210 / ASTM D665B	-	Pass	Pass	Pass	Pass
Timken OK Load	ASTM D2782 / IP 240	Kg/lbs	39/85	41/90	41/90	>41/90
FZG fail stage (A8.3/90)	ISO 14635-1 / DIN 51354		-	-	>14	>14
FZG fail stage (A16.6/90) *	ISO 14635-1 / DIN 51354	-	>12	>12	>12	>12

Subject to usual manufacturing tolerances.

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