



## Customer benefits

- Significantly longer oil life compared to mineral oils to lower service costs
- Outstanding Micro-pitting performance
- Excellent EP properties
- High thermal stability and oxidation resistance
- Low risk for sludge and deposit formation (cleaning properties)
- Good wear and corrosion protection
- Improved energy efficiency

## Applications

Meropa EliteSyn WS is an industrial gear oil range applicable with the following different gear designs:

- Helical
- Bevel Helical
- Planetary
- Worm gears
- Marine gear units

The product is also suitable for the use of different applications, like:

- Fill for life, disposable gearboxes
- Textile lubricants
- Chain and conveyor lubricants
- Kiln and oven lubricants
- Sliding bearings and roller bearings in high load/EP applications.

## Product features:

- **Meropa® EliteSyn WS** is available in ISO 150, 220, 320, 460 and 680 viscosity grades.
- **Meropa® EliteSyn WS** is a synthetic industrial gear lubricant range showing superior performance under demanding operating conditions.
- It is based on water soluble polyalkylene glycols, thus providing outstanding micro-pitting and EP performance.
- Furthermore, the product shows excellent thermal stability and good corrosion protection. As a result of very low coefficients of friction of water soluble polyglycols, **Meropa® EliteSyn WS** contributes to lower mechanical losses and higher efficiencies in many applications.



## Approvals, performance and recommendations

### Approvals

- Flender T 7300 A-b (Revision 16) (in progress)

### Performance

- DIN 51 517/3: CLP
- ISO 12925: CKPG; CSPG, CTPG
- David brown, type G lubricants

## Product maintenance and handling

Meropa EliteSyn WS is a PAG gear lubricant which is not compatible with mineral oils or most other synthetic lubricant types. A change over procedure is available.

There is a incompatibility between PAG´s and AL due to the high polarity of Polyglycol with regard to lubricated “tribo components” (friction partners steel to Al material) like bearing cages or worm gear drives and therefore the combination is not allowed!

But Al-gearboxes - which have no bearing or sliding surfaces in direct contact with a steel shaft - are uncritical and can therefore be used with Meropa EliteSyn WS. Please check with the customer/OEM!

Mixing Meropa EliteSyn WS and other PAG based gear oils could result in a change in appearance. Please note that possible haziness has no influence on the performance of Meropa EliteSyn WS.

Meropa EliteSyn WS does not affect common seal and gasket materials. The use of Nitrile Rubber (NBR), Fluoro-Silicone or Vinyl-Methyl Polysiloxane (Q) is recommended for high temperature applications.

The product is not compatible with polyurethane based elastomers, leather, cork, asbestos, paper and board.

It is recommended to use Meropa EliteSyn WS in gearboxes where the internal surface is unpainted or coated with resistant materials, for example a resistant two-pack epoxy formulation.

## Typical key properties

MEROPA® ELITESYN WS				
TEST	METHOD	RESULT		
Viscosity Grade		150	220	320
Product Code		533289	533290	533291
Shelf Life		60 months from filling date		
Appearance	visual	Bright & Clear yellow liquid		
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s	ASTM D445	159	230	330
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s	ASTM D445	30	42	59
VI	—	230	235	245
Colour	ASTM D6045	0.5	0.5	0.5
Density at 15°C, kg/l	ASTM D4052	1.054	1.058	1.062
Flash Point, COC, °C	ISO	>290	>290	>290
Pour point, °C	ASTM D5950	-42	-42	-39
FE8 bearing roller wear, <30 mg,	DIN 51819-3	pass	pass	pass
FZG load stage, A/ 8.3/90	DIN 51354	>14	>14	>14
FZG Micro-pitting, 90°C Damage Load stage	FVA nr 54 I-IV	>10 high	>10 high	>10 high

## Typical key properties *continued*

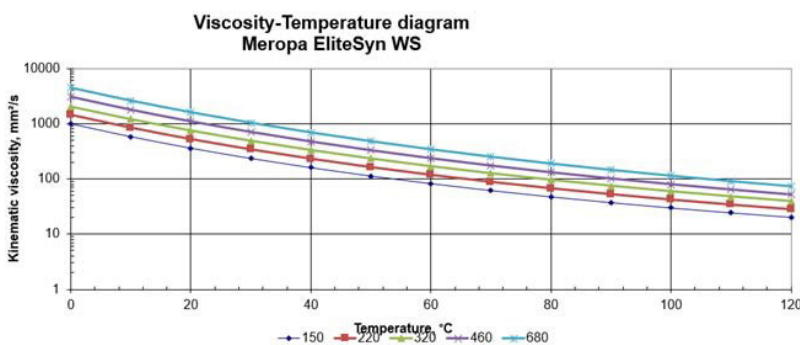
MEROPA® ELITESYN WS			
TEST	METHOD	RESULT	
Viscosity Grade		460	680
Product Code		533292	533293
Shelf Life		60 months from filling date	
Appearance	visual	Bright & Clear yellow liquid	
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s	ASTM D445	470	690
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s	ASTM D445	79	114
VI	—	252	263
Colour	ASTM D6045	0.5	0.5
Density at 15°C, kg/l	ASTM D4052	1.065	1.070
Flash Point, COC, °C	ISO	>290	>290
Pour point, °C	ASTM D5950	-36	-36
FE8 bearing roller wear, <30 mg,	DIN 51819-3	pass	pass
FZG load stage, A/ 8.3/90	DIN 51354	>14	>14
FZG Micro-pitting, 90°C Damage Load stage	FVA nr 54 I-IV	>10 high	>10 high

### ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit [www.chevronlubricants.com](http://www.chevronlubricants.com).

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by:  
**Chevron Global Lubricants**  
 – Asia Pacific



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

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