Rokolub® 320F

Synthetic lubricant for LDPE hyper compressors

Local. Global. Integrated.

General information

Rokolub® 320F is top class lubricant based on PAG (polyalkylne glycol) technology which perfect conforms with the requirements for high performance lubricants applied in compressors pumping ethylene – LDPE production. Rokolub® 320F is a fully synthetic product used in hyper compressors for low density polyethylene (LDPE) production. Hyper compressors are required for high compression units up to 3500 bar where the final stage compression is carried out in high speed reciprocating compressors.
A variety of products, including white mineral oil, can be used as a lubricant in hyper compressors. However, polyalkylene glycols (PAGs) are generally the most cost effective option, offering the best possible lubricant performance with outstanding economy.

Typical physical properties of Rokolub® 320F*

Parameter	Rokolub® 320F	Method
Viscosity 40°C, cSt	270	ASTM D445
Viscosity index	235	ASTM 2270
Flash point,°C	>250	ASTM D92
Pour point,°C	-20	ASTM D97
Specific gravity, 20/20°C	1,08	DIN 51757

* The typical values presented here are believed to be accurate; however, they should not be considered as constituting be a specification.

References and Specification of Rokolub® 320F

- Official Burckhardt Certificate of pumpabillity; Rokolub® 320F is on Burckhardt's list of oils allowed for hyper compressors for LDPE
- FDA Confirmation for all ingredients in Rokolub® 320F; SEC.178.3570 LUBRICANTS WITH INCIDENTAL FOOD CONTACT, 21 CRF SEC. 178.2010 – ANTIOXIDANTS AND/OR STABILIZERS FOR POLYMERS)
- Rokolub® 320F contains antioxidant

Advantages of Rokolub® 320F

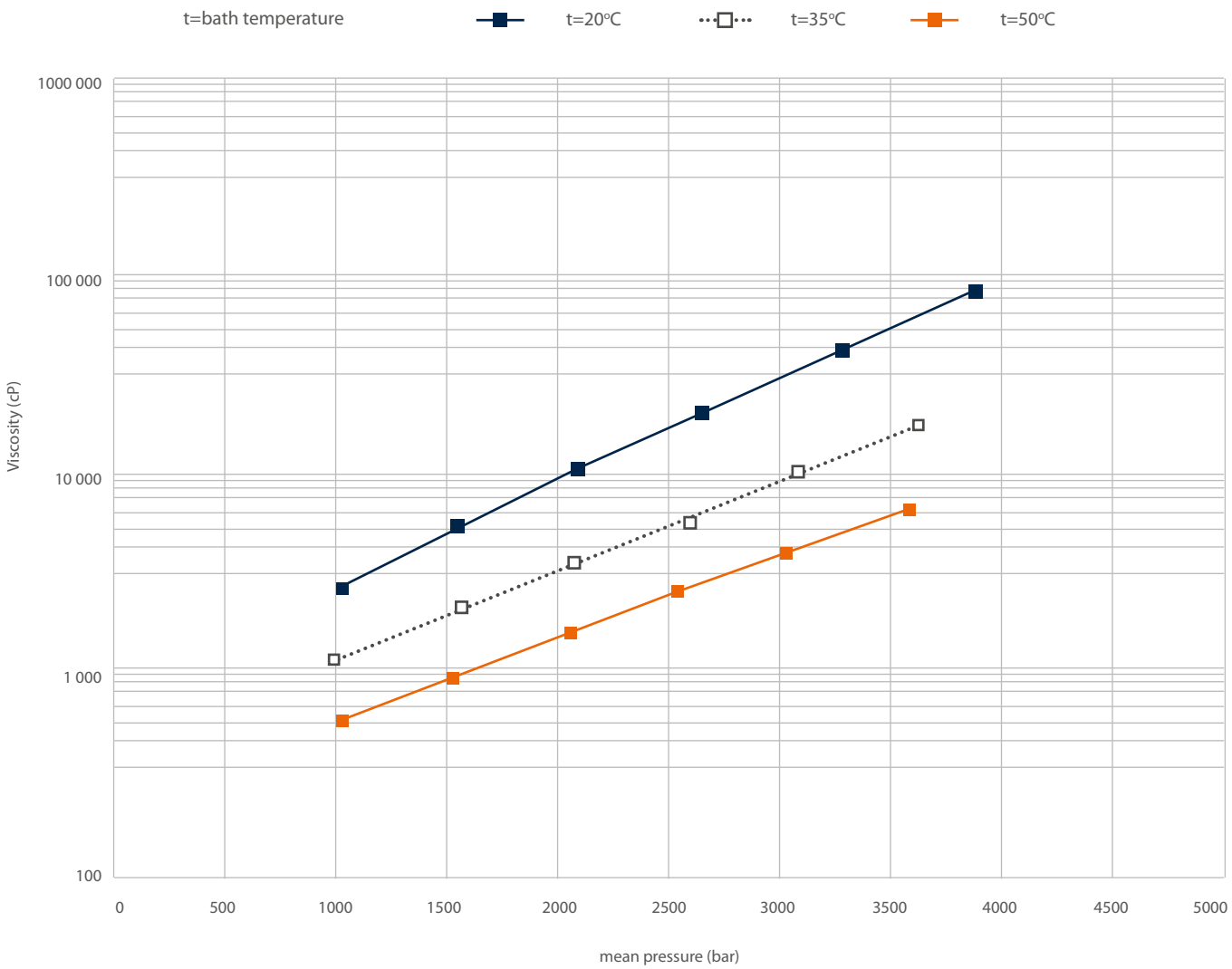
- Solubility in ethylene lower than white oils and poly-isobutylenes which minimizes viscosity reduction due to ethylene dissolving. Thank to this Rokolub® 320F is much less likely to be removed or washed from the plunger running zone.
- Under the same conditions consumption of white oils and poly-isobutylenes during hyper compressor work is about two times higher than consumption of Rokolub® 320F. Also, compressor's maintenance requirements are reduced because of less pre-polymer deposits.

	PAG	White oil/Poly-isobutylene
Consumption	0.6 – 1.6 litres	> 2 litres
Relative consumption	1	2-3

Rokolub® 320F has flat pressure-viscosity characteristics regardless to bathe temperature; it flows readily in the high pressure lubricant lines.

Figure 1. Viscosity and pressure curves for Rokolub® 320F according to Burckhardt Compression

Viscosity (in fct. of pressure pump type=CH (164 U/min)) and pressure curves for Rokolub® 320F according to Burckhardt Compression



Rokolub® 320F comparing to other lubricants technologies (white oil/poly-isobutylene) has the highest resistance degradation index while working in aggressive atmosphere. Rokolub® 320F has superior load carrying and lubricant performance comparing to white oils and poly-isobutylenes, thus minimising wear on plungers and packings. Typical lifetime figures for packings reported by end users are in the range of 20.000-40.000 hrs.

Registration & Regulatory Information
Please refer to the safety datasheet.

Handling & Storage
This product can be stored up to 1 year at ambient storage temperature and conditions without any deterioration.
Please refer to the safety datasheet for all relevant information.

Miscellaneous
Various packaging types are available; please contact PCC Rokita representative for further information.

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Please visit our capital group business platform:
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September 2025