

Mobil Rarus™ PE KPL Series

Ethylene and co-monomers Hyper Compressor oils



Energy lives here™

Key benefits



Helps reduce compressor and reactor fouling through low reactivity



High purity lubricant oil helps ensure the purity of the final polymer



Suitable for manufacture of polymers for food-packaging containers, pharmaceutical and thin sheets (plastic bags)

Specifically designed for the lubrication of very high pressure ethylene and co-monomers compressors, Mobil Rarus™ PE KPL Series oils are blended with high purity components and are recommended for their following features:

- BHT-free formulation enables production of food-grade BHT-free LDPE
- Non hygroscopic nature and very low water content reducing corrosion
- Superior lubricity helping to reduce plunger wear and increase cylinder life

Mobil Rarus PE KPL 220 oil can be used up to

3,900

bar in Hyper Compressor cylinder lubrication

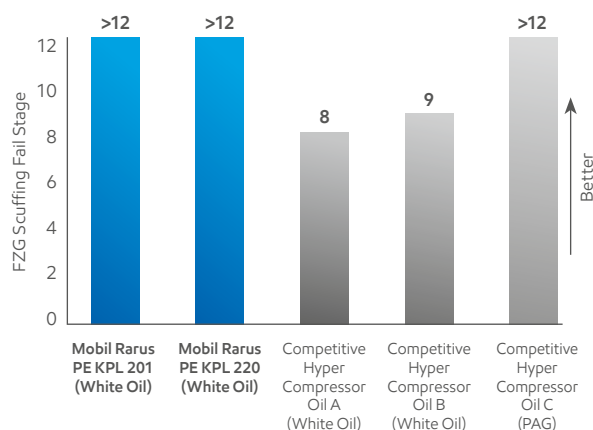
Typical properties*

Mobil Rarus PE KPL Series	201	220
Density @ 15°C, ASTM D4052, kg/L	0.869	0.874
Kinematic viscosity @ 40°C, ASTM D 445, mm ² /s	115	210
Colour, Saybolt, ASTM D156	+30	+30
Flash Point, ASTM D 92, °C	250	270
Pour Point, ASTM D 97, °C	-12	-12
TAN, ASTM D664, mg KOH/g	0.5	0.5
Water content, ASTM D 6304, ppm	<100	<100

Lubricity and wear protection

DIN/ISO 14635-1 FZG Load-Carrying Capacity (Scuffing) Test [A/8.3/90]

Mobil Rarus PE KPL Series oils show superior load carrying capacity compared to other white oil-based products.



* Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com. ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

Mobil Rarus™ PE KPL Series

Corrosion Protection

Rust Prevention (ASTM D665B)

Testing procedure:

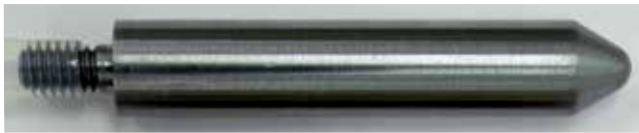
- Steel pin immersed in 90:10 oil:synthetic seawater mixture
- Stirred at 60°C for 24 hours

Testing results:

- Any sign of rust results in failure
- Mobil Rarus PE KPL Series provides good corrosion protection compared to competitive white oil and polyalkylene glycol based hyper compressor lubricants

	Mobil Rarus PE KPL 201	Mobil Rarus PE KPL 220	Competitive Hyper Compressor Oil A (White Oil)	Competitive Hyper Compressor Oil B (White Oil)	Competitive Hyper Compressor Oil C (PAG)
ASTM D665B Rust Prevention Rating	Pass	Pass	Pass	Fail, Severe*	Fail, Severe*

* Severe rusting: >5% of surface corroded



Pass
(Example Reference)

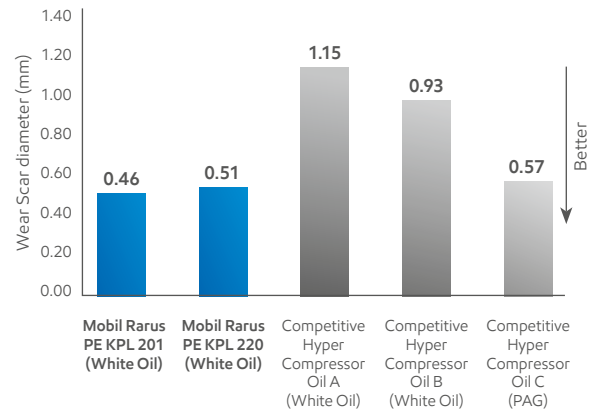
Claims:

- NSF H1 registered, food grade lubricants for incidental food contact
- EU Directive 174/2015, plastic materials intended to come into contact with food
- FDA 21 CFR 177.1520, processing aid in production of polymers
- FDA 21 CFR 178.3570, lubricants with incidental food contact
- USP 35 (2012) <661>, containers for Pharmacopeial articles

Lubricity and wear protection

ASTM D4172 Wear Preventive Characteristics, Four-Ball Method.

Mobil Rarus™ PE KPL Series provides superior protection compared to competitive white oil-based hyper compressor lubricants.



Mobil Rarus™ PE KPL 201 and 220

are NSF H1 registered.

NSF Registration Numbers:

Mobil Rarus PE KPL 201: 146247

Mobil Rarus PE KPL 220: 155659

	Mobil Rarus PE KPL 201	Mobil Rarus PE KPL 220
NSF H1	Registered	Registered
NSF Registration number	146247	155659

Mobil Rarus PE KPL 201 and Mobil Rarus PE KPL 220 are formulated to not contain BHT.

Industrial Lubricants



Advancing Productivity™

Safety

Enhanced cylinder life reduces the need for maintenance and the associated safety risks of employee-equipment interaction.

Environmental Care**

Using Mobil Rarus™ PE KPL Series oils for both cylinder and cylinder cooling eliminates potential for cross contamination, reducing overall oil consumption and need for disposal.

Productivity

Reduced corrosion and optimum wear protection helps limit maintenance downtime, which can enhance operational productivity.

** Visit mobil.com/industrial to learn how certain Mobil-branded lubricants may provide benefits to help minimize environmental impact. Actual benefits will depend upon product selected, operating conditions and applications.

Health and Safety

Based on available information, these products are not expected to produce adverse effects on health when used for the applications referred to above and the recommendations provided in the Material Safety Data Sheets (MSDSs) are followed. MSDSs are available upon request through your sales contact office or via the Internet. These products should not be used for purposes other than the applications referred to above. If disposing of used product, take care to protect the environment.

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