Mobil Rarus™ PE KPL 220

Mobil Industrial , United Kingdom

Ethylene and co-monomers compressor oil

Product Description

Mobil Rarus™ PE KPL 220 is an ISO VG 220 Ethylene and co-monomers compressor oil. It is based on a patented combination of high purity, saturated hydrocarbon oils, supplemented with friction-reducing and free-radical trap additives at adapted treat levels.

Features and Benefits

- Low reactivity components. Do not interfere with polymerization reactions.
- High purity components. Do not induce any discoloration or odor in the final polymer.
- Components approved for food contact. Suitable for the manufacture of polymers for food packaging containers.
- Low polarity. Suitable in the manufacture of polymers for electrical insulation and thin sheets (plastic bags).
- High pumpability. Adequate flow of lubricating oil and improved cylinder lubrication at very high pressure.
- Reduced maintenance shutdowns.
- Outstanding anti-wear and corrosion protection enhances equipment life and performance.

Applications

Mobil Rarus PE KPL 220 is specifically designed for the lubrication of very high pressure ethylene and co-monomers compressors. It may be used up to 3800 bars, according to oil injection system and temperature.

Mobil Rarus PE KPL 220 is formulated for the most demanding applications. Its viscosity and composition are tailored for the highest pressures found in ethylene compressors for LDPE production. The viscosity increase under the highest pressures remains low enough to ensure an adequate flow of lubricating oil.

Additives also prevent the early polymerization of reactive gas components and impurities into the compressor itself, which may lead to formation of deposits, and eventually to lubrication failure. Additives also mitigate friction losses and may improve cylinder packing life. As a result, shutdowns for maintenance, are less frequent.

This product meets or exceeds the requirements of:

- Burckhardt Pumpability certificate for hyper compressors for pressures up to 3850 bars at a minimum temperature of 70 °C for a pump speed of 164 rpm
- Burckhardt Pumpability certificate for hyper compressors for pressures up to 3896 bar at a minimum temperature of 70 °C for a pump speed of 250 rpm

Specifications and Approvals

This product is registered to the requirements of:
NSF H1 146247

This product meets or exceeds the requirements of:
European Regulation (EU) 2015/174

This product meets or exceeds the requirements of:
US Pharmacopeia <661> (vol. 1,
FDA 21 CFR 177.1520
FDA 21 CFR 178.3570
Burckhardt VSB 1001180

Properties and Specifications

Property	
Grade	ISO 220
Density @ 15 C, kg/l, ASTM D4052	874
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	210
Saybolt Color, ASTM D156	+30
Flash Point, Cleveland Open Cup, °C, ASTM D92	270
Pour Point, °C, ASTM D97	-12
Total Acid Number, mgKOH/g, ASTM D664	0.5
Water Content, max ppm, ASTM D6304	<100

Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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