



UNIVERSAL PAG 46/68/100

Product ID: 80221

Product description

TecLub's PAG grades are fully formulated ISO grade polyalkylene glycol lubricants designed specifically for application with R-134a in mobile air-conditioning systems. TecLub's dicapped PAG lubricants, based on a new "capping" technology, provide efficient lubrication for compression type refrigeration units, with excellent refrigerant solubility over the full temperature range and a substantially reduced tendency to absorb water. Superior lubricating properties as a result of the new capping technology improves suitability for use in all applications.

TecLub's dicapped Universal PAG grades are recommended as a standard for automotive air conditioning applications as they are formulated for extremely high levels of performance where the compressor requires a lubricant with viscosity 46, **68** or **100** cSt @ 40°C.

Gases

- ✓ P R-1234yf
- ✓ PR-134a
- ✓ PR-22
- ✓ PR-744 (CO2)

Benefits

- ✓ Chemically inactive; very tolerant of high temperatures, will not react to form harmful acids.
- ✓ Extremely low hygroscopicity compared to regular capped PAG products. Premium formula reduces problems with blocked capillaries due to ice to a minimum, because the oil attracts less water. Therefore compressor efficiency is maximized.
- ✓ Universal formulation, can be used in almost any automotive air conditioning system.
- ✓ Highly superior lubricating qualities compared to alternative capping technologies, alternative synthetic technologies and mineral oils.
- ✓ Exceptional Viscosity Index (VI) the high VI of TecLub's PAG grades enhances compressor life by ensuring efficient running at temperature extremes. The high VI may also allow the user to select a lower viscosity fluid than typically used, with associated power usage savings.
- ✓ Good high temperature stability, even in the presence of water, resulting in reduced downtime and lower maintenance costs.
- ✓ Formulated expertise the TecLub PAG grades contain efficient additive technology to protect the compressor from any problems related to corrosion of white or yellow metals, to minimize the effects of wear and extreme pressure conditions and to ensure long fluid life.

Typical properties

Performance attribute	46	68	100
Viscosity @ 40°C (cSt)	46	68	98
Viscosity @ 100°C (cSt)	7,9	11,06	15,8
Viscosity Index	142	154	172
Pour Point (°C) (cSt)	-42	-40	-38
Flash Point (°C) (cSt)	200	206	210
Water content (ppm)	<250	<250	<250





Application

TecLub's PAG grades are suitable for applications where older vehicles using the R-12 / mineral oil combination are being retrofitted from CFC R-12 to HFC R-134a. TecLub's PAG grades demonstrate excellent solubility with R-12, are stable in the presence of residual levels of R-12 and are also miscible and stable with residual levels of mineral oil.

Product handling

Polyalkylene glycols are hygroscopic relative to other synthetic lubricants and mineral oils. Excessive water absorption of a polyalkylene glycol may be prevented by minimizing the product's exposure to air. Handling of small volumes requires simply ensuring that the container is closed when not in use and that time spent transferring product to the compressor system is minimized. Unopened containers are to be stored clean, dry and at normal temperatures. As an option our Universal PAG 46/68/100 oil can be provided with a UV leak detection dye, that makes it easier to trace leaks in your air conditioning system with a UV light.

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