



Cetus[®] PAO

Description

Cetus[®] PAO is a synthetic compressor and turbocharger lubricant formulated with the highest-quality polyalphaolefin (PAO) base fluids. Polyalphaolefin base fluids have excellent thermal and oxidation stability, high viscosity index, low pour point, and excellent hydrolytic stability. A high-performance additive package enhances these qualities. The result is a superior lubricant for application in turbochargers and in most reciprocating and rotary screw compressors.

Typical Characteristics

ISO Viscosity Grade	46	68
Code	042022	042023
Copper corrosion, 24h at 120°C	1b	1b
Density at 15°C, kg/l	0.84	0.85
Flash point, COC, °C	230	235
Four ball EP test		
weld point, °C	160	160
FZG test (A/8.3/90), failure load stage	12	12
Pour point, °C	-59	-40
Rust test, synthetic seawater	Pass	Pass
Viscosity, kinematic, mm ² /s (cSt)		
at 40°C	46.0	68.0
at 100°C	7.8	10.3
Viscosity index	136	138

Recommended Uses

Cetus PAO 46 has specifically been designed for the lubrication of oil-injected, rotary screw compressors operating at high discharge temperatures (>100°C) and high discharge pressures (>15 bar). It is also recommended for all other types of compressors, such as single and multistage reciprocating and centrifugal compressors where an ISO 46 grade is required. Cetus PAO 46 is approved by Atlas Copco ECB 573 for multistage GR and GR Pack screw compressors and by Tanabe as synthetic rotary screw compressor oil for extended drain intervals. Cetus PAO 68 has specifically been developed for lubricating turbochargers in large diesel engines, where two separate lubricating oil systems are in place. Cetus PAO 68 is approved by ABB for VTR..4 turbochargers and fulfills the requirements for a 5,000-hour drain interval and for a low-friction lubricating oil. Cetus PAO 68 is also recommended for lubricating reciprocating air compressors operating at high discharge temperatures (>200°C). Cetus PAO meets the German DIN 51506 VDL standard.

Performance Benefits

1. Exceptional Thermal and Oxidation Stability

Provides exceptional thermal and oxidation stability, assuring long lubricant life in high-temperature operation.

2. Extended Drain Intervals

Extended drain intervals of up to 8,000 hours for screw compressors make Cetus PAO 46 cost-effective.

3. Low Pour Point

Low pour point allows for application in cold climates.

4. Seal Compatibility

Addition of a seal swell agent provides good seal compatibility by overcoming the tendency of polyalphaolefins to shrink seals.

5. Air Release Properties

Has excellent air release properties which are important in oil-flooded screw compressors.

6. Reduced Maintenance and Downtime

Reduces operating costs by extending service intervals and providing trouble-free operation.

Typical test data are average values only. Minor variations which do not affect product performance are expected in normal manufacturing. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended. (June, 2010)
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