



marine lubricants

# Cetus® PAO 46, 68



## Description

Cetus® PAO oils are synthetic compressor lubricants formulated with the highest-quality polyalphaolefin PAO base fluid. The PAO base fluid provides thermal and oxidation stability, high viscosity index, low pour point and good hydrolytic stability. A high-performance additive package further enhances these qualities. The products are designed to meet the requirements of compact, high output rotary air compressors where mineral products are not effective any longer and make an ideal choice for large diesel engine turbocharger applications as well.

## Typical Characteristics

ISO Viscosity Grade	46	68
MPID	219403	219402
Density 15°C, kg/l	0.84	0.85
Flash Point, °C	232	240
Pour Point, °C	-46	-47
Viscosity, kinematic		
mm <sup>2</sup> /s @ 40°C	46.0	68.0
mm <sup>2</sup> /s @ 100°C	8.1	10.4
Viscosity Index	150	140
Rust test, distilled seawater	Pass	Pass
Copper Corrosion, 3h, 100°C	1b	1b
Air release @ 50 °C, min	6	9

## Recommended Applications

Cetus PAO 46 and Cetus PAO 68 have specifically been designed for the lubrication of oil-injected screw and rotary sliding vane air compressors operating at high discharge temperatures (>100°C) and high discharge pressures (>15 bar).

The products are also recommended for application in other types of compressors such as single and multistage reciprocating and centrifugal compressors where ISO VG 46 respectively 68 grades are required, especially in the where continuous high temperature operation is in use with discharge temperatures up to 200°C.

The products are also suitable for applications where a synthetic bearing and circulating oil is needed, such as turbochargers in low and medium speed diesel engines with separate lubricating oil circuit for the bearings. Cetus PAO 68 for example is approved by ABB for VTR turbochargers and fulfils the requirements for a 5,000-hour drain interval and for a low-friction lubricating oil.

*Cetus PAO products are not recommended for use in breathing air compressors.*

## Cetus PAO Products Are Approved For:

✓ <b>Alup Kompressoren</b>	✓ <b>Tanabe Pneumatic Machinery</b>
✓ <b>Donghwa Pneutec</b>	✓ <b>ABB VTR.4 Turbochargers</b> – 5000 h drain interval (ISO VG 68)
✓ <b>Nanjing</b> compressors	✓ <b>Deno</b> compressors
✓ <b>Sauer</b> compressors	✓ <b>GEA Wesfalia</b> purifier
✓ <b>Shung Shin</b>	



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## Cetus PAO Products Meet The Requirements Of:

- ✓ **DIN** 51506 VDL
- ✓ **Hatlapa**

- ✓ **TMC** Tamrotor Marine Compressor
- ✓ **Cryostar**

## Performance Benefits

**1. Good Thermal and Oxidation Stability**

The robust oxidation stability promotes high temperature performance and protection, even in case of high output oil flooded screw air compressors. In this type of compressor, the lubricant is not only subject to the high temperatures resulting from the compression but also mixed with air. This promotes oil oxidation, where a standard mineral based lubricant cannot always offer satisfactory drain interval any longer. Cetus PAO continues to offer extended drain potential.

The thermal stability further enables a low carbon deposit formation tendency, maintaining compressor performance and keeping discharge lines and air vessels clean, even under severe operating conditions.

**2. Long Machinery Life and Maximum Compressor Efficiency**

The high viscosity index and load carrying capacity help to maintain effective lubrication and minimize wear on highly loaded parts, at both low and high operating temperatures. An effective inhibitor system further provides excellent rust and corrosion protection.

**3. Anti-Foam and Air Release Properties**

The air release properties and very low foam tendency aid performance in oil rotary air compressor and turbocharger applications.

**4. Low Evaporation Loss**

The low evaporation rate helps to reduce oil carryover and guarantees minimum oil consumption.



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