

# COOLMAX PAO 46

Product code: 262201301

## Synthetic ammonia refrigeration compressor fluid

This product is a PAO based synthetic compressor fluid. It is specially formulated to lubricate compressors used in ammonia refrigeration systems. The problems normally seen (high oil consumption-reduced efficiency due to pipe clogging) will be history when the product is used. This product is fully miscible with conventional mineral oils, therefore a change-over procedure is fairly easy. High concentrations of mineral based product will however reduce the performance. The product compatibility with paints, seals, gaskets and hoses, is similar to mineral oils. No special precautions related to compatibility are required when changing over from a mineral oil lubricant.

## Applications

Reciprocating and rotary screw compressors used in ammonia systems as well as gas compressors and vacuum pumps in process systems where ammonia vapours occur.

## Benefits & Advantages

- Fully compatible with ammonia
- Contains a minimum of additives
- Prevent deposit formation in low temperature systems
- Reduces discharge valve deposits
- Excellent lubricity
- High film strength
- Zero wax content
- Improves compressor efficiency
- Low volatility
- Very low vapour pressure

## Gas type compatibility

The product is suitable for processing the following gases:

R717 (ammonia)	R290 (propane)	R22
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## Typical Performance Data

Typical	Test Method	Value
Density @ 15 °C, gr/l		0.850
Viscosity @ 40 °C	ASTM D445	45
Viscosity @ 100 °C	ASTM D445	7.42
Viscosity Index	ASTM D2270	>135
Pour point, °C	ASTM D97	-47
Flash point, °C	ASTM D92	265
Auto ignition point, °C	ASTM D4048	346
TAN, mg KOH/g	ASTM D664	<0.01
Water content, ppm	ASTM D1744	<50
4-ball wear test <ul style="list-style-type: none"> <li>• Welding load, kg</li> <li>• Scar mm, 1200 RPM 75 °C 20 kg/hr</li> </ul>	ASTM D2793	100 0.4
Steel corrosion 24hrs @ 100 °C	ASTM D665A	None
Falex mm, 250 lbs for 10 min.	ASTM D3233	0.3
Foaming tendency ml, sequence I	ASTM D892	20
Demulsibility, 55 °C, 30 min	ASTM D2711	40/40/0
Copper corrosion, 24 hr	ASTM D4048	1a

All performance data on this Technical Data Sheet are indicative only and can vary during production.