# **Technical Data Sheet**





## Coolmax POE

### Advanced HFC refrigeration compressor fluid

### Description

Coolmax POE is a high performance lubricant that combines specially blended polyolester (POE) refrigeration lubricants with ashless additives to provide superior protection for HFC refrigeration systems. Coolmax POE offers exceptional solubility and superior lubricity in HFC and blended refrigerants.

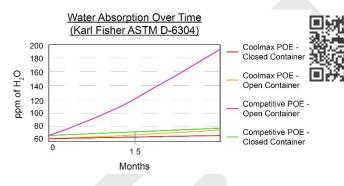
Coolmax POE lubricants have exceptional chemical and thermal stability, and offer a very long service life.

### **Benefits**

- Unsurpassed solubility in HFC and blended refrigerants
- Excellent low temperature fluidity
- High viscosity index
- Excellent film strength and antiwear properties
- Top-off compatibility with most other POE refrigeration compressor fluids
- Excellent resistance against water contamination
- Excellent rust and corrosion protection
- Very long fluid life
- Allows quick and easy refrigerant conversions
- Avoids copper plating

### • Enhanced resistance against water contamination

Most competitive POE compressor fluids are highly susceptible to water contamination. The hygroscopic nature (high affinity for water) of most POE compressor fluids will lead to decreased bearing life and premature fluid change outs. Coolmax POE offers enhanced resistance to water contamination.



Even in an open container Coolmax POE has shown to absorb less water then most competitive PEO fluids

### Formulated to make conversions easier

Converting a HCFC (i.e. R-22) system to HFC (i.e. R-507, R-134a) often requires that you flushes any mineral oil fluid from the system. Most competitive fluids will require that you have no more then 5% of the existing mineral oil remaining in the system. To reach this 5% level multiple flushes are often required, which can be very time consuming and costly.

Coolmax POE makes systems conversions easier by being able to accommodate much high levels of residual mineral oil.

ASRAE#	Recommended # of Residual Mineral Oil				
	Competitive Formulations	Series Coolmax POE			
R-134a	Max 5%	10-15%			
R-507	Max 5%	10-15%			

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### Gas type compatibility

Coolmax POE is suitable for processing the following gases:

R23	R134a and R1234yf	R404a	R410a	R410b	R407c
R410b	R417a	R422a	R422d	R427a	R507/507a

### Typical performance data

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	Test method	22	32	46	55	68	100	125	150	170	
Appearance			Bright & clear								
Base oil type			Polyol ester								
Colour, Gardner	ISO 2049	<1	<1	<1	<2	<2	<2	<2	<2	<2	<2
Density @ 20 °C, kg/dm3	ISO 12185	0.994	0.982	0.975	0.972	0.968	0.959	0.959	0.960	0.960	1.02
Flash point, COC, °C	ISO 2592	>240	>250	>250	>250	>250	>260	>265	>270	>270	>26
Pour point, °C	ISO 3016	<-50	<-50	<-50	<-45	<-45	<-30	<-30	<-30	<-32	<-3(
Kin. viscosity cSt @	ISO 3104										
<ul> <li>100 °C</li> <li>40 °C</li> </ul>		5 22	6 32	7 46	8 55	10 68	11 98	13 125	15 150	16 174	23 C 230
Viscosity index	ISO 2909	125	120	120	115	110	110	105	95	95	120 2
Acid number mg KOH/g	ISO 6618	0.03	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.08 <b>C</b>
Water content, ppm	MO-10-001	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50 0
Copper corrosion	ASTM D130	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a
• •	ASTM D130	Ia	Id	Id	Id		Id	Ia	Id	Id	Id

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