

COOLMAX CO 68

Product code: 262204001

Miscible CO2 refrigeration compressor fluid

This product is a premium lubricant that has been formulated specifically for use in CO2 refrigeration systems. The advanced formulation will provide superior miscibility and lubricity in high pressure CO2 systems. It will also offer excellent chemical and thermal stability, excellent low temperature fluidity, and a very long service life. The product is based on double end capped technology.

The development of trans-critical CO2 systems requires specialty lubricants due to the high pressure and subsequently higher loading on bearings. Most conventional lubricants such as mineral oils and alkylbenzenes are not soluble with CO2. Polyol ester (POE) synthetic lubricants show good miscibility properties; however, this can result in a dramatic reduction in lubricant viscosity. PAGs show partial miscibility with CO2, however the viscometrical properties of polyalkylene glycols remain unaffected and the decrease in viscosity observed with POEs is not observed for PAG's under CO2 dilution, thus good wear protection properties are retained with PAG's.

Benefits & Advantages

- Excellent miscibility with CO2 refrigerants
- Excellent thermal and oxidation stability and long life in CO2 systems
- Very high viscosity index for better compressor protection at elevated temperatures
- Very high flash & auto-ignition points for added safety.
- Low volatility
- Excellent film strength and anti-wear properties
- Very long-life fluid
- Excellent carbon and varnish control
- Excellent rust & corrosion control
- Non-toxic
- Non-hazardous

Typical Performance Data

Typical	Test Method	Value
Viscosity @ 40 °C, cSt	ASTM D445	68
Viscosity @ 100 °C, cSt	ASTM D445	15.7
Viscosity Index	ASTM D2270	213
Pour point, °C	ASTM D97	-46
Flash point, °C	ASTM D92	>200
Water content, % mass	ASTM E284	<0.05
TAN, mgKOH/g	ASTM D974	<0.10
4-ball wear scar, 40kg/1hr, mm	ASTM D4172	0.53
Copper corrosion 24hrs/100 °C	ASTM D130	1a
Demulsibility @ 54 °C, 30 min	ASTM D2711	40/40/0

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