

# Emkarate<sup>®</sup> RL3000

## Typical Properties Data Sheet

### Product Description:

Emkarate RL3000 is an ISO VG100 synthetic polyol ester lubricant formulated specifically for use in open-drive and hermetic mobile air-conditioning compressors using HFC R134a and HFO R1234yf refrigerants. This product provides effective wear protection for metal surfaces for increased system life and improved efficiency and is suitable for both initial fill and service fill. Emkarate RL3000 has the required miscibility characteristics along with unparalleled chemical and thermal stability which enables the use of this product over a wide operating temperature range.

Analysis	Method	Typical Value
Viscosity @ 40°C (cSt)	ASTM D445	83
Viscosity @ 100°C (cSt)	ASTM D445	10.5
Viscosity Index	ASTM D2270	112
Pour Point (°C)	ASTM D97	-38
Flash Point COC (°C)	ASTM D92	282
Acid Value (mg KOH/g)	ASTM D664	<0.1
Density @ 20°C (g/ml)	ASTM D1298	0.979
Miscibility at 10%, (°C)	Internal	
HFC-134a Upper/Lower		>50/-25
HFO-1234yf Upper/lower		>50/-60
Specific Heat @ 20°C, (J/g*°C)	Internal	1.9

*These values are not intended for use in preparing specifications. Additional technical information such as water content is available upon request.*

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