



OIL COMPRESSOR, POLYOLESTER, REFRIGERATION

WSS-M2C31-B2

1. SCOPE

The material defined by this specification is a polyolester lubricant, free from impurities.

2. APPLICATION

This material specification defines the physical and chemical properties of a polyester based synthetic lubricant to be used with HFC-134a and HFO-1234YF. The specification is released for POE oils used in High Voltage Electric Air Conditioning Compressors operating from -40 to 125 °C.

3. REQUIREMENTS

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.2 Specific Gravity (ASTM D1298 at 20 °C)	0.90 - 1.05 g/cm ³
3.3 Flash Point (ASTM D93)	200 °C min
3.4 Viscosity (ASTM D445)	64-88 mm ² /s at 40 °C 7.9-10 mm ² /s at 100 °C
3.5 Color (ASTM D1500)	1.0 max
3.6 Pour Point (ASTM D97)	- 30 °C max
3.7 Total Acid Number (ASTM D974)	0.05 mg KOH/g max
3.8 Dielectric Strength (ASTM D1816)	25 kV min
3.9 Water Content (ASTM D4672)	200 ppm max
3.10 Falex, Extreme Pressure (ASTM D3233)	2200N min

3.11 CONSISTENCY

This material shall be free from acid, alkali, or other foreign matter. It must also be free from any objectionable odor.

Date	Action	Revisions	Rev. 0
2013 08 13	Released		



4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification. Contact gmfs@ford.com for questions concerning Engineering Material Specifications.