

TECHNICAL SPECIFICATION

ALPHA REFRIGERATION OIL 46

Description And Specifications :

Alpha refrigeration oil 46 is a high performance refrigeration oil designed specifically for the lubrication of refrigeration reciprocating and screw compressors using ammonia (NH₃, R-717). It is formulated with high quality mineral paraffinic technology providing excellent low temperature performance, low volatility and thermal stability.

Its very low miscibility with ammonia limits oil thinning and minimizes oil carry-over. Low vapour pressure reduces oil consumption and need for top-ups while preventing fractionation (viscosity increase).

Viscosity control over a wide temperature range to obtain the lowest fluidity required in the evaporator and the highest viscosity for enhanced equipment protection in the compressor.

Recommendations :

recommended for refrigeration systems for cylinder and bearing lubrication in conventional reciprocating and screw refrigeration compressors where ammonia refrigerant is used.

This includes:

Large industrial reciprocating and screw refrigeration compressors used in the food industry for food preparation and freezing

Industrial applications such as food freezing and cold storage plants Marine refrigeration applications

Technical Data Sheet :

REFRIGERATION OILS	TEST METHODS	ISO 46
Density @ 15°C	ASTM D4053	0.976
Flash point °C	ASTM D 92	230
Pour point °C	ASTM D97	-46
KIN.Viscosity @40c	ASTM D7042	46.0
KIN.Viscosity @100c	ASTM D7042	6.9
Viscosity index	ASTM D2270	104
Total acid number mgKOH/g	TAN	0.02

**AT ALPHA ENERGY PETROLEUM INDUSTRIES, WE FOCUS ON CREATING ADVANCED
LUBRICANTS AND LUBRICANT COMPOUNDS THAT ENHANCE MACHINE EFFICIENCY
AND EXTEND SERVICE LIFE.**