

HFC REFRIGERATION OIL



LUBRICATION



TOTAL

High performance synthetic refrigeration oil

APPLICATIONS

Specialized Freon
refrigerant compressor
service

HFC REFRIGERATION OILS meet the special requirements and are formulated from modified ester base stocks to provide controlled miscibility, as well as solubility with all HFC based refrigerants, including R-134a

HFC REFRIGERATION OILS are recommended for both mobile and stationary applications calling for refrigerants such as R-22, R-134a, R401-A, R401-B, R402-A, R402-B, R404A, R407A, R407B, R407C, R410A, R507, R 507A or where polyol esters are utilized.

SPECIFICATIONS

Recommended for refrigeration equipment containing HFCs as refrigerants manufactured by any of the following: Aerzen, Bock, Carrier, Frascold, Gram, Grasso, Howden, McQuay, Sabroe, Sulzer, Tecumseh, York

ADVANTAGES

High technical
performance assures
efficient and reliable
compressor performance

- Good chemical and physical stability to resist chemical reaction with the refrigerant
- Excellent lubricity to protect compressors and system components from wear
- Thermal stability to eliminate excessive hard carbon deposits at compressor hot spots such as valves or discharge ports
- Controlled miscibility to prevent separation of flocculent materials from the oil refrigerant mixture at the lowest temperature points in the system
- Proper viscosity when diluted with refrigerant to insure high film strength at elevated operating temperatures which provides good fluidity under the coldest operating temperatures.
- A high dielectric strength to insure good insulating properties in hermetic units where the oil-refrigerant mixture serves as an insulator between the motor and the compressor body
- Very low pour point to prevent congealing in refrigerant lines or evaporator

TYPICAL CHARACTERISTICS—HFC REFRIGERATION OILS

	32	46	68	120
ISO Grade	32	46	68	120
Color, (ASTM D 1500)	1.0	1.0	1.0	1.5
Specific gravity 60/60 F (ASTM D 1298)	0.939	0.926	0.945	0.940
Viscosity @ 40°C, cSt (ASTM D 445)	31.9	50.5	64	131
Viscosity @ 100°C, cSt (ASTM D 445)	5.63	7.0	8.9	14.5
Viscosity index (ASTM D 2272)	116	94	114	122
Pour point, °F (°C) (ASTM D 97)	-49 (-45)	-49 (-45)	-45 (-43)	-33 (-36)
Flash point °F (°C) (ASTM D 92)	480 (249)	480 (249)	511 (266)	520 (271)
Dielectric strength, kV (ASTM D-877)	43	43	43	43
Water, ppm (ASTM D-1533)	80	80	80	80

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HFC Refrigeration Series
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TOTAL Lubricants USA with a policy of continuous improvement, reserves the right to change specifications as our technology progresses.
We are not responsible for the misuse and/or misapplication of our products. MSDS are found on our web sites.