CITGO CLARION® SYNTHETIC REFRIGERATION FLUIDS

Date 10/06

DESCRIPTION: CITGO Clarion Synthetic Refrigeration Fluids are high performance non-foaming lubricants formulated using synthetic base stocks. These fluids provide outstanding thermal stability and oxidation resistance. These fluids offer naturally high VI's allowing them to be used over a wide range of temperatures. There is no paraffin wax component to form deposits in the expansion valves or capillary area. These products are completely compatible with petroleum based products.

BENEFITS: CITGO Clarion Synthetic Refrigeration Fluids offer outstanding thermal and oxidation stability compared to mineral oils and offer the following:

- Outstanding low temperature performance.
- Compatibility with most paints and elastomers used in refrigeration systems.
- NSF H1 registered lubricants (formerly USDA H1) for use in food processing plants under the jurisdiction and inspection of the USDA.
- Compliance with US FDA regulation 21 CFR 178.3570 for lubricants with the possibility of incidental food contact.

APPLICATIONS: CITGO Clarion Synthetic Refrigeration Fluids are recommended for use with many refrigerants, including ammonia, carbon dioxide, Chlorofluorocarbons (CFC) such as R-12 and Hydrochlorofluorocarbons (HCFC) such as R-22 and mixtures such as R-501.

These products are not recommended for use with Hydrofluorocarbons (HFC) such R-134A.

CITGO Clarion Synthetic Refrigeration Fluid ISO 32 and 68 are designed for use in rotary screw compressors.

CITGO Clarion® Synthetic Refrigeration Fluid ISO 100 is designed for use in reciprocating compressors.

TYPICAL PROPERTIES:

CITGO CLARION SYNTHETIC REFRIGERATION FLUIDS

ISO GRADE	**32**	**68**	**100**
Material Code	632550001	632552001	632553001
Specific Gravity, 60/60 °F	0.827	0.835	0.838
Density, lb/gal	6.89	6.95	6.98
Viscosity, ASTM D 445, cSt at 40˚C	31	66	102
cSt at 100˚C	5.8	10	14.2
cSt at -20˚C	392	980	5,000
cSt at -40˚C	2,900	7,800	45,000
Viscosity Index, ASTM D 2270	138	137	142
Flash Point, ASTM D 92, °F (°C)	474 (246)	510 (266)	508 (264)
Pour Point, ASTM D 97, °F (°C)	-71 (-57)	-54 (-48)	-65 (-54)
NSF Registered	H1	H1	H1
FDA 21 CFR 178.3570	✔	✔	✔