CITGO NORTH STAR® REFRIGERATION OILS

Date 04/18

DESCRIPTION: CITGO North Star Refrigeration Oils are premium quality naphthenic oils, blended for use in refrigeration compressors.

QUALITIES: Special properties provide excellent refrigeration compressor lubrication including:

- Light color
- Low acid number
- Low pour and floc points
- Excellent foam resistance
- Good seal control
- Control stability and compatibility with refrigerants

APPLICATIONS: CITGO North Star Refrigeration Oils are recommended for use in refrigeration compressors and other low-temperature applications, including air conditioning systems. They are recommended for other extremely low temperature applications requiring low temperature fluidity and floc points of -50F or lower. Not recommended for use with hydrofluorocarbons (HFC) such as R-134A.

TYPICAL PROPERTIES:

CITGO NORTH STAR® REFRIGERATION OILS

GRADE	**32**	**54**
Material Code	643102001	643105001
Gravity, ASTM D4052, °API	26.0	25.4
Density, lb/gal at 60°F	7.48	7.51
Flash Point, ASTM D92, °F (°C), COC	370 (188)	392 (200)
Viscosity, ASTM D445, cSt at 40°C	32.0	55
cSt at 100°C	4.7	6.7
ASTM D2161, SUS at 100°F	167	287
SUS at 210°F	42	48.6
Viscosity Index, ASTM D2270	33	63
Pour Point, ASTM D97, °F (°C)	-44 (-42)	-49 (-45)
Floc Point, °F (°C)	-62 (-52)	-56 (-49)
Color, ASTM D1500	L1.0	L1.5
Aniline Point, ASTM D611, °F (°C)	178 (81)	181 (83)
Neutralization No., ASTM D974	0.01	0.01
Foam Inhibitor	Yes	Yes
Foam, ASTM D892, Sequence I	0-0	0-0
Sequence II	10-0	10-0
Sequence III	0-0	0-0

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