Product information

R Series

Synthetic hydrocarbon refrigeration lubricants

Your benefits at a glance

- Withstands severe service conditions
- High viscosity index
- No paraffins

Your requirements - our solution

Summit R Series synthetic hydrocarbon refrigeration lubricants are designed to function under severe service conditions. These fluids have a very high viscosity index, contain no paraffin and are compatible with various fluorinated refrigerants, ammonia, methyl chloride and carbon dioxide. The Summit R Series is completely miscible with petroleum-based fluids.

These fully synthetic lubricants are NSF Registered and meet USDA 1998 (H1) guidelines (lubricants with incidental food contact).

Summit R Series lubricants are Kosher approved and Halal certified. Summit is an ISO 21469 certified facility.

Application

R-100, R-150 and R-200 are designed to operate in rotary compressors.

R-300, R-400 and R-500 are designed to operate in reciprocating compressors.

Material safety data sheets

Material safety data sheets can be requested via our website https://www.klsummit.com. You may also obtain them through your contact person at Summit Lubrication.

Characteristics	R-100	R-150	R-200	R-300
Article number	340518	340113	340475	340519
Appearance	clear	-	-	-
NSF H1 registration number	134117	150873	134122	134123
Requirements of refrigerator oils, DIN 51503-1, KAA, limited requirements for products with additives	passed	passed	passed	passed
Density, 20°C	approx. 0.825 g/cm³	approx. 0.830 g/cm³	approx. 0.832 g/cm³	approx. 0.837 g/cm³
Flash point, Cleveland open cup	≥ 230 °C	-	-	-
Flash point, ASTM D92, Cleveland open cup	-	≥ 240 °C	≥ 230 °C	≥ 255 °C
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 5.8 mm²/s	approx. 7.8 mm²/s	approx. 10.7 mm²/s	approx. 14.9 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 31 mm²/s	approx. 47 mm²/s	approx. 70 mm²/s	approx. 106 mm²/s
Viscosity index, ASTM D2270	approx. 133	approx. 137	approx. 141	approx. 145
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approx. -65 °C	approx. -61 °C	approx. -57 °C	approx. -52 °C

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Mineral Oils associated with, MOAH (Mineral Oil Aromatic Hydrocarbons), (Information based on recipe. The presence of impurities, cannot be ruled out.)	Component of recipe	Component of recipe	Component of recipe	Component of recipe
Mineral Oils associated with, MOSH (Mineral Oil Saturated Hydrocarbons), (Information based on recipe. The presence of impurities, cannot be ruled out.)	Component of recipe	Component of recipe	Component of recipe	Component of recipe
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months	36 months	36 months

Characteristics	**R-400**	**R-500**	**R-600**
Article number	340565	340520	340521
Appearance	-	-	-
NSF H1 registration number	163959	139585	139586
Requirements of refrigerator oils, DIN 51503-1, KAA, limited requirements for products with additives	-	-	-
Density, 20°C	approx. 0.841 g/cm³	approx. 0.842 g/cm³	approx. 0.85 g/cm³
Flash point, Cleveland open cup	-	≥ 255 °C	≥ 276 °C
Flash point, ASTM D92, Cleveland open cup	≥ 255 °C	-	-
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 20.1 mm²/s	approx. 25.6 mm²/s	approx. 41 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 158 mm²/s	approx. 220 mm²/s	approx. 405 mm²/s
Viscosity index, ASTM D2270	approx. 142	approx. 149	approx. 150
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approx. -48 °C	approx. -46 °C	approx. -42 °C
Mineral Oils associated with, MOAH (Mineral Oil Aromatic Hydrocarbons), (Information based on recipe. The presence of impurities, cannot be ruled out.)	Component of recipe	-	-
Mineral Oils associated with, MOSH (Mineral Oil Saturated Hydrocarbons), (Information based on recipe. The presence of impurities, cannot be ruled out.)	Component of recipe	-	-
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months	36 months

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Summit Lubrication

Your expert in specialty lubricants. Since 1982, we have partnered with you to bring you the right solution and advanced lubrication technologies. With over 500 products, from air and gas compressor oils to refrigeration oils, we develop top-of-the-line products tailored to your specific needs. Your success is our success.

Summit Lubrication a brand of Klüber Lubrication NA LP /
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