

NGL® Series

Synthetic natural gas compressor



Your benefits at a glance

- Extremely resistant to hydrocarbon and CO₂ dilution
- Compatible with well-bore treatment fluids and soluble in water
- Allows protection over a broad temperature range

Your requirements - our solution

The lubricant problems generally encountered with the compression of natural gas and CO₂ are related to the reaction of the gas stream with the lubricant. These include:

- Solubility of gas in the lubricant causes reduced lubricant viscosity resulting in cylinder scoring and high wear rates. Compensating for this with a higher viscosity lubricant can cause handling problems at lower temperatures
- Absorption of lubricant into the gas stream results in high lubricant usage rates and a depletion of protective lubricant film in the cylinder
- Condensed hydrocarbon liquids in the cylinder area can "wash" the lubricant from the cylinder walls causing severe mechanical damage
- The carryover from increased lubricant feed rates or use of heavily compounded oils to compensate for hydrocarbon and CO₂ dilution and wash-out can damage the well formation and plug CO₂ injectors
- Gases such as CO₂ and H₂S may be corrosive to compressor components. NGL protects against the corrosive effect of these gases to compressor components while maintaining lubricating properties.

Summit NGL Series polyalkylene glycol lubricants were formulated to combat these problems associated with high pressure reciprocating compressors pumping natural gas, carbon dioxide, or

process gases. NGL Series lubricants are extremely resistant to hydrocarbon and CO₂ dilution and absorption of gas stream components. Any lubricant carryover will not impair the well formation as it is compatible with well-bore treatment fluids and soluble in water. The result is a lubricant maintaining the proper viscosity for wear protection, resisting wash-out and carryover, and posing no threat of damage to the well formation or CO₂ injectors.

The extremely high viscosity index of the NGL Series lubricants allows protection over a broad temperature range. The low pour point provides all-season ease of handling even in very cold climates. The use of pressurized and heated tanks as well as heat traced lines can be eliminated.

Summit NGL Series can offer these same advantages when compressing a number of other difficult gases including hydrogen, helium and nitrogen. Please contact your Summit representative with your specific gas application.

The extremely high viscosity index of NGL-778 and NGL-667 allows protection over a broad temperature range. The low pour point provides all-season ease of handling even in very cold climates. The use of pressurized and heated tanks as well as heat traced lines can be eliminated.

Summit NGL-778 and NGL-667 can offer these same advantages when compressing a number of other difficult gases including hydrogen, helium and nitrogen. Please contact your Summit representative with your specific gas application.

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	NGL 444	NGL-555	NGL-667	NGL-777
Article number	340079	340275	340429	340209
Density	-	-	1.058 g/cm ³	-
Density, 20°C	approx. 1.04 g/cm ³	approx. 1.042 g/cm ³	-	approx. 1.06 g/cm ³

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Characteristics	NGL 444	NGL-555	NGL-667	NGL-777
Flash point	-	-	210 °C	-
Flash point, Cleveland open cup	≥ 210 °C	≥ 250 °C	-	≥ 250 °C
Flash point, ASTM D92, Cleveland open cup	-	-	-	-
Kinematic viscosity, 100°C	-	-	23.0 mm ² /s	-
Kinematic viscosity, 40°C	-	-	123 mm ² /s	-
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 16.0 mm ² /s	approx. 19.5 mm ² /s	-	approx. 27.8 mm ² /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 80.0 mm ² /s	approx. 100 mm ² /s	-	approx. 153 mm ² /s
Viscosity index	-	-	225	-
Viscosity index, ASTM D2270	approx. 213	approx. 218	-	approx. 221
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approx. -50 °C	approx. -48 °C	-	approx. -44 °C
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346, based on standard	-	-	-45 °C	-
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 months	36 months	60 months

Characteristics	NGL 888
Article number	340080
Density	-
Density, 20°C	approx. 1.073 g/cm ³
Flash point	-
Flash point, Cleveland open cup	-
Flash point, ASTM D92, Cleveland open cup	≥ 250 °C
Kinematic viscosity, 100°C	-
Kinematic viscosity, 40°C	-
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 38.3 mm ² /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 223 mm ² /s
Viscosity index	-
Viscosity index, ASTM D2270	approx. 225

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Characteristics	NGL 888
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approx. -42 °C
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346, based on standard	-
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months

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.

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