

# NGL® Series

Synthetic natural gas compressor



## Your benefits at a glance

- Extremely resistant to hydrocarbon and CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub> dilution and wash-out can damage the well formation and plug CO<sub>2</sub> injectors
- Gases such as CO<sub>2</sub> and H<sub>2</sub>S 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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	1.04 g/cm <sup>3</sup>	1.042 g/cm <sup>3</sup>	1.058 g/cm <sup>3</sup>	1.06 g/cm <sup>3</sup>
Flash point	210 °C	240 °C	210 °C	250 °C

# NGL® Series

Synthetic natural gas compressor



Characteristics	NGL 444	NGL-555	NGL-667	NGL-777
Kinematic viscosity, 100°C	16.0 mm <sup>2</sup> /s	21.0 mm <sup>2</sup> /s	23.0 mm <sup>2</sup> /s	28.8 mm <sup>2</sup> /s
Kinematic viscosity, 40°C	79.0 mm <sup>2</sup> /s	113 mm <sup>2</sup> /s	123 mm <sup>2</sup> /s	150 mm <sup>2</sup> /s
Viscosity index	218	213	225	233
Pour point				
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346, based on standard	-48 °C	-49 °C	-45 °C	-42 °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-778	NGL 888
Article number	340451	340080
Density	1.071 g/cm <sup>3</sup>	1.073 g/cm <sup>3</sup>
Flash point	250 °C	250 °C
Kinematic viscosity, 100°C	33.7 mm <sup>2</sup> /s	38.5 mm <sup>2</sup> /s
Kinematic viscosity, 40°C	180 mm <sup>2</sup> /s	209 mm <sup>2</sup> /s
Viscosity index	235	236
Pour point	-42 °C	
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346, based on standard		-42 °C
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

## 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 /  
9010 County Road 2120, Tyler, TX 75707 /  
Phone: +1 800 749 5823 / [www.klsummit.com](http://www.klsummit.com)

The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

Publisher and Copyright: Klüber Lubrication NA LP. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication NA LP and if source is indicated and voucher copy is forwarded.