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Product Data Sheet

NOTE: The information in this publication is the result of careful testing in our laboratories, complemented by selected literature. It does not in any way constitute a guarantee, nor does it serve as a license to operate any patent. Due to widely varying conditions of product use, which are beyond our control, it is strongly recommended that the product be tested for suitability. Product typical properties in this publication are current as of August 6, 2010.



SYNTHETIC BLEND

NGP SERIES Natural Gas Compressor

When a synthetic oil is not needed, Summit's **NGP Series** of highly refined petroleum based lubricants are formulated to provide some of the same benefits provided by hydrocarbon based synthetics such as PAO and PIB. The additive technology used in the **NGP Series** enable them to far outperform other mineral oil based lubricants. Some of the benefits are:

- The high viscosity index (V.I.) of **NGP** is comparable to a synthetic PAO and means a significant increase in operating temperature range over most mineral based oils. It also means a lower viscosity grade **NGP** product may be used in place of a higher viscosity mineral oil with a lower viscosity index. This can mean lower temperature flow limits and may eliminate the need for heated, pressurized day tanks and heat traced lines. It can also mean better lubricant film strength at higher cylinder and packing temperatures on reciprocating compressors.
- The pour point of the **NGP Series** approaches that of a synthetic PAO and may be as much as 25 °F lower than some mineral based oils. The lower limit may eliminate no flow shutdowns on cold days or the need for special tank and line heaters.
- **NGP** is made from highly purified petroleum oils that only contain trace amounts of sulfur and other impurities found in group I mineral oils. Impurities common to many mineral oil base stocks can react with components of the gas stream to form by-products harmful to the compressor system.
- **NGP Series** is formulated to inhibit against the corrosive effects of wet CO₂ and H₂S often found in gas compressor applications.
- **NGP** is tailor made for gas compressor applications. It is not simply an R&O oil developed for general purpose lubrication put into gas compressor service.

Both synthetics and petroleum based oils have their place in gas compressor applications. Consult with Summit's Gas Compressor Specialist to find out which product is right for your application.

Physical Properties

PRODUCTS	NGP-32	NGP-68	NGP-100	NGP-150
ISO Viscosity Grade	32	68	100	150
Viscosity:				
@ 40°C, cSt	32	67	95	150
@ 100°C, cSt	5.4	10	13.1	18.6
@ 100°F, SUS	165	343	488	774
@ 210°F, SUS	44	61	72	95
Viscosity Index	103	137	136	140
Specific Gravity	0.868	0.870	0.872	0.873
Density				
@ 60°F, g/mL	0.867	0.868	0.871	0.872
@ 185°F, g/mL	0.823	0.824	0.827	0.831
Pour Point, °F (°C)	-27(-33)	-27(-33)	-25(-32)	-25(-32)
Flash Point, °F (°C)	440(227)	470(243)	465(241)	480(249)
Four Ball Wear Test, mm	0.60	0.51	0.56	0.58

Thermal Characteristics:

Specific Heat
 BTU/lbm - °F
 140°F = 0.476
 160°F = 0.485
 180°F = 0.494

Thermal Conductivity
 BTU/hr - ft² and °F/inch
 0°F = 0.94
 200°F = 0.88
 400°F = 0.83