TECHNICAL DATA SHEET

NEXT GPL PAG

PAG Compressor Lubricant · 141 Series

NEXT GPL PAG is a polyalkylene glycol (PAG) based lubricant for hydrocarbon gas compression, hydrocarbon refrigeration, and heat pump applications. Its low dilution rate in hydrocarbon service preserves operating viscosity where mineral or PAO-based lubricants lose film strength.

Equally suited for petrochemical process gas compression, LNG boil-off gas handling, field gas gathering, and propane/butane refrigeration systems, GPL PAG delivers long service life across a wide temperature and pressure envelope.

APPLICATIONS

- Hydrocarbon gas compression (light to medium)
- Petrochemical process gas compression
- LNG boil-off and vapor compression
- Natural gas field and infrastructure compression
- Hydrocarbon refrigeration (R-290, R-600, R-600a)
- Industrial heat pumps (hydrocarbon refrigerant)

GASES

- Light to medium hydrocarbon gases
- Hydrocarbon refrigerants: R-290, R-600, R-600a
- Ethylene, propylene, and petrochemical streams
- LNG boil-off gas and flash gas

BENEFITS

- Exceptional resistance to viscosity dilution by hydrocarbon gases
- Reliable miscibility with hydrocarbon refrigerants for proper oil return
- Very low volatility and minimal lubricant carryover
- Excellent thermal and oxidation stability
- Long service life under continuous duty
- Very high viscosity index (178–238) for wide-temperature operation
- Superior carbon and varnish control
- Corrosion protection in sour gas service (H_2S)

TECHNICAL SPECIFICATIONS

Typical properties

ISO Viscosity Grade	32	46	68	100	150	220	320	460	680
Viscosity @ 40 °C (cSt)	34	46	68	100	150	220	320	450	655
Viscosity @ 100 °C (cSt)	7.1	9.2	12.9	17.8	25	36	50	68	95
Viscosity Index	178	185	190	196	201	213	220	229	238
Density @ 15 °C (g/cm³)	0.99	0.98	0.98	0.99	1.00	1.00	1.00	1.00	1.02
Pour Point (°C)	-57	-51	-48	-42	-39	-33	-30	-30	-30
Flash Point (°C)	208	210	211	215	217	223	230	220	208
Copper Strip Corrosion (D130)	1b	1b	1b	1b	1b	1b	1b	1b	1b
Rust Test (D665, Distilled H_2O)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

NOTE

Values in this Technical Data Sheet are typical and do not constitute a specification. Manufacturing specifications are available on request. Minimum operating temperatures are based on low-temperature viscosity and refrigerant miscibility data; consult NEXT Lubricants for operations below the pour point. Routine oil analysis is recommended to assess the in-service condition of the lubricant. Specifications are subject to change due to formulation or raw-material updates; always verify that this TDS is the most current version.