

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.

In mechanical refrigeration for LPG, natural gas processing, and NGL recovery, NEXT GPL PAG serves propane (R-290) and propylene (R-1270) compressors with the miscibility required for reliable oil return. It remains equally suited for petrochemical process gas, LNG boil-off handling, and field gas gathering.



APPLICATIONS

- Hydrocarbon gas compression (light to medium)
- Petrochemical process gas compression
- LNG boil-off and vapor compression
- Natural gas field and infrastructure compression
- LPG, natural gas processing, and NGL refrigeration (R-290, R-1270, R-600, R-600a)
- Industrial heat pumps (hydrocarbon refrigerant)

GASES

- Light to medium hydrocarbon gases
- Hydrocarbon refrigerants: R-290, R-1270, R-600, R-600a
- Ethylene, propylene, and hydrocarbon-rich refinery and petrochemical gas 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 (H₂S)

TECHNICAL SPECIFICATIONS

Typical properties

ISO Viscosity Grade	32	46	68	100	150	220	320	460	680
Viscosity @ 40 °C / 104 °F (cSt)	34	46	68	100	150	220	320	450	655
Viscosity @ 100 °C / 212 °F (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 / 59 °F (g/cm³)	0.99	0.98	0.98	0.99	1.00	1.00	1.00	1.00	1.02
Pour Point (°C / °F)	-57 / -71	-51 / -60	-48 / -54	-42 / -44	-39 / -38	-33 / -27	-30 / -22	-30 / -22	-30 / -22
Flash Point (°C / °F)	208 / 406	210 / 410	211 / 412	215 / 419	217 / 423	223 / 433	230 / 446	220 / 428	208 / 406
Copper Strip Corrosion (D130)	1b	1b	1b	1b	1b	1b	1b	1b	1b
Rust Test (D665, Distilled H ₂ O)	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.