

TECHNICAL DATA SHEET

NEXT GPL PAG-WS

PAG Compressor Lubricant · 162 Series

NEXT GPL PAG-WS is a water-soluble polyalkylene glycol (EO/PO copolymer) lubricant designed for medium to heavy hydrocarbon gas compression and high-pressure service. Its chemistry resists dilution by high-molecular-weight hydrocarbon and process gases.

Suited for sour gas, natural gas infrastructure, carbon capture and CCUS compression, petrochemical process gas, and vapor recovery, NEXT GPL PAG-WS maintains viscosity stability at pressures and gas compositions where conventional lubricants lose film strength.

In hydrocarbon refrigeration and high-temperature heat pumps, NEXT GPL PAG-WS retains viscosity at condensing temperatures.



APPLICATIONS

- Medium to heavy hydrocarbon gas compression
- Sour gas and high-pressure compression
- Carbon capture and CCUS compression
- Natural gas infrastructure compression
- Petrochemical process gas compression
- Vapor recovery compression
- High-temperature heat pumps (R-600, R-600a, R-601, R-601a)

GASES

- Light and heavy hydrocarbon gas mixtures
- Sour gas and acid gas streams (H₂S)
- Hydrocarbon process gases
- Heat pump refrigerants: R-600, R-600a, R-601, R-601a

BENEFITS

- Strong resistance to viscosity dilution by heavy hydrocarbons
- Suited for high-pressure compression service
- Very low volatility and minimal lubricant carryover
- Excellent thermal and oxidation stability
- Very high viscosity index (180–248) for wide-temperature operation
- Superior carbon and varnish control
- Corrosion protection in sour gas service (H₂S)
- Extended service life under continuous duty

TECHNICAL SPECIFICATIONS

Typical properties

ISO Viscosity Grade	32	46	68	100	150	220	320	460	680
Viscosity @ 40 °C (cSt)	32	46	68	100	150	220	320	460	680
Viscosity @ 100 °C (cSt)	6.8	9.9	14.1	20	29	41	58	79.4	114
Viscosity Index	180	207	217	224	232	240	248	255	268
Density @ 15 °C (g/cm³)	1.03	1.03	1.04	1.04	1.05	1.06	1.06	1.06	1.06
Pour Point (°C)	-54	-51	-48	-45	-42	-33	-30	-30	-27
Flash Point (°C)	217	220	227	234	241	243	246	244	244
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. 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.