TECHNICAL DATA SHEET

NEXT GPL PAO-FG

Food Grade Gas Compressor Lubricant · 206 Series

NEXT GPL PAO-FG is a food grade polyalphaolefin (PAO) gas compressor lubricant formulated for applications where incidental food contact is possible. Its high viscosity index and very low pour point ensure reliable performance from cryogenic to elevated operating temperatures.

Registered as NSF H1 and suited for CO_2 compression, biogas upgrading, cryogenic gas processing, and industrial gas applications in food, beverage, and pharmaceutical facilities where food safety compliance is required alongside high-performance lubrication.

APPLICATIONS

- CO_2 process gas compression (food grade)
- Biogas and biomethane (RNG) compression
- Cryogenic and industrial gas compression
- Hydrocarbon gas compression (food contact environments)

GASES

- CO_2 (R-744)
- Light hydrocarbon gases
- Biogas and biomethane
- Inert and process gases

BENEFITS

- Food grade formulation (NSF H1 registered)
- Excellent thermal and oxidation stability
- Very low pour point (down to −63 °C / −81 °F)
- Extremely low volatility and minimal carryover
- Strong corrosion protection
- Extended service life under continuous duty
- Excellent low-temperature fluidity

TECHNICAL SPECIFICATIONS

Typical properties

ISO Viscosity Grade	32	46	68	100	150	220
Viscosity @ 40 °C / 104 °F (cSt)	32	46	68	100	144	220
Viscosity @ 100 °C / 212 °F (cSt)	6.0	7.7	10.4	14.0	18.8	25.8
Viscosity Index	135	136	140	142	148	155
Density @ 15 °C / 59 °F (g/cm³)	0.83	0.84	0.84	0.84	0.85	0.85
Pour Point (°C / °F)	-63 / -81	-58 / -72	-54 / -65	-46 / -51	-44 / -47	-36 / -33
Flash Point (°C / °F)	245 / 473	262 / 504	260 / 500	260 / 500	261 / 502	261 / 502
Copper Strip Corrosion (D130)	1a	1a	1a	1a	1a	1a
Rust Test (D665, Distilled H_2O)	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.