

NEXT PAO

Polyalphaolefin Refrigeration Oil

NEXT PAO is synthetic lubricant for industrial refrigeration, heat pumps and process gas compressors. This formulation is based on neutral non-reactive base-oils and additives. This ensures reliable operation in both inert and reactive gas environments. NEXT PAO offers extremely low carryover rates and has a high viscosity index and a very low pour point allowing for operations over a wide temperature range.



Applications

- Reciprocating compressors
- Rotary screw compressors
- Centrifugal compressors

Gases

- Hydrocarbon gases, e.g., Ethane (R-170), Propane (R-290), Propylene (R-1270), Isobutane (R-600a)
- HFC gases, e.g., R-22
- Inert gases, e.g., CO₂ (R-744), Nitrogen, Argon, Helium, Hydrogen
- Reactive gases (Usage in reactive gas applications only after consultation with NEXT Lubricants)

Benefits

- Superior low temperature fluidity and oil return properties
- Very low oil carryover rates
- Excellent seal compatibility
- Offers very good protection against corrosion.
- Long fluid life
- Excellent chemical stability and compatible with reactive gases



Specifications

ISO Viscosity Grade	32	46	68	100	150	220	320
Viscosity @ 40 °C (cSt)	32	46	64	100	150	220	320
Viscosity @ 100 °C (cSt)	6.1	7.8	10.2	14.3	20.2	29.3	41.9
Viscosity Index	137	139	145	149	156	172	186
Density g/cm ³ @ 15 °C	0.83	0.83	0.83	0.82	0.82	0.82	0,84
Pour Point (°C)	-66	-60	-57	-57	-51	-45	-45
Flash Point (°C)	247	262	264	264	265	266	268
Copper Strip Corrosion (ASTM D130) (100 °C for 3 h)	1a	1a	1a	1a	1a	1a	1a
Rust Test (ASTM D665) (Distilled Water)	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Values included in this TDS are typical and do not constitute a specification. Manufacturing specifications are available upon request. Minimum operating temperatures are based on low temperature viscosity measurements and refrigerant miscibility data. Consult a NEXT Lubricants representative for operations below the pour point of the oil. It is recommended that routine oil analysis tests be performed to properly assess the condition of the oil. Verify that this TDS is the most UpToDate version, specifications are subject to change due to possible formulation and raw material changes.

