

TECHNICAL DATA SHEET

NEXT 717-68-SYN

Synthetic Ammonia Refrigeration Lubricant

NEXT 717-68-SYN is a full synthetic polyalphaolefin (PAO) ammonia refrigeration lubricant for ultra-low-temperature service down to -57 °C (-71 °F). Its wax-free, thermally stable formulation delivers lower carryover than both mineral and PAO/AB blends, making it the preferred choice for deep-freeze applications with oil return challenges.

OEM approved by GEA, Mayekawa (Mycom), and Howden, and compliant with DIN 51503 KAA. Available in ISO VG 46 and 68.



APPLICATIONS

- Ultra-low-temperature ammonia refrigeration
- Deep-freeze cold storage and blast freezing
- Systems with oil return challenges

GASES

- Ammonia R-717 (down to -57 °C / -71 °F)
- OEM approved: GEA, Mycom, Howden
- DIN 51503 KAA compliant

BENEFITS

- Superior low-temperature fluidity and oil return
- Lower carryover than mineral and PAO/AB blends
- Wax-free PAO formulation
- Minimizes defrost cycles
- Excellent seal compatibility
- Clean-running with extended service life

TECHNICAL SPECIFICATIONS

Typical properties

	717-46-SYN	717-68-SYN
Viscosity @ 40 °C / 104 °F (cSt)	46.2	64
Viscosity @ 100 °C / 212 °F (cSt)	7.8	10.2
Viscosity Index	139	145
Density @ 15 °C / 59 °F (g/cm³)	0.83	0.83
Pour Point (°C / °F)	-60 / -76	-57 / -71
Flash Point (°C / °F)	262 / 504	264 / 507
Color (ASTM D1500)	0	0

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.