



TURBO BELHERR 5



5 cSt Synthetic Turbine Oil

SPECIFICATIONS

MIL-PRF-23699G, DEF STAN 91-101/2.

DESCRIPTION

5 cSt synthetic turbine lubricant formulated for turbine service applications, developed to provide thermal stability and oxidation resistance under severe operating conditions. It is intended for applications requiring good load-carrying capability, low volatility, and adequate low-temperature performance, while maintaining consistent operation in systems demanding deposit control and lubricant stability during extended service periods.

APPLICATIONS

Suitable for turbine systems requiring a low-viscosity synthetic lubricant with thermal stability, oxidation resistance, and load-carrying capability. It may be used in equipment requiring excellent low-temperature fluidity, evaporation control, and functional compatibility with elastomeric materials according to the swell values indicated in the technical specifications.

BENEFITS

- Promotes reliable operation.
- Helps reduce volatility.
- Contributes to extended lubricant service life.
- Maintains performance at low temperatures.
- Supports operational continuity.

PROPERTIES

- High thermal stability.
- Oxidation resistance.
- Low volatility.
- Good load-carrying capability.
- Excellent low-temperature fluidity.

PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	UNIT	ASTM METHOD	VALUE
Density @ 15°C	kg/L	ASTM D1298	0.9749 ±2.5%
Viscosity @ -40°C	mm ² /s (cSt)	ASTM D2532	7,950 mm ² /s
Viscosity @ 40°C	mm ² /s (cSt)	ASTM D445	24.2 ±2%
Viscosity @ 100°C	mm ² /s (cSt)	ASTM D445	4.97 ±1%
Flash Point	°C	ASTM D92	≥ 265°C
Pour Point	°C	ASTM D97	≤ -57°C
Acid Number	mg KOH/g	SAE ARP 5088	0.43
Evaporation Loss, Max. 6.5 hr @ 204°C	%	ASTM D972	3%
Foaming Tendency, 5 min Aeration @ 24°C	-	ASTM D892	9
Foaming Stability, 1 min Settling @ 24°C	-	ASTM D892	0
Foaming Tendency, 5 min Aeration @ 93.5°C	-	ASTM D892	8
Foaming Stability, 1 min Settling @ 93.5°C	-	ASTM D892	0
Foaming Tendency, 5 min Aeration @ 24°C After 93.5°C Test	-	ASTM D892	8
Foaming Stability, 1 min Settling @ 24°C	-	ASTM D892	0
Load Carrying Capacity, 2000 rpm	%	IP 66	99%
Load Carrying Capacity, 6000 rpm	%	IP 66	86%
Runner Swell, Nitrile Rubber (192 hrs @ 130°C)	%	Derd Test Method 4	10.5%
Runner Swell, Silicone Rubber Optional (192 hrs @ 175°C)	%	Derd Test Method 4	10.5%
Runner Swell, Viton Rubber (192 hrs @ 200°C)	%	Derd Test Method 4	14.0%
Runner Swell, Optional Viton LCS Rubber (192 hrs @ 200°C)	%	Derd Test Method 4	22.5%

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* Este documento reemplaza todas las versiones anteriores