

TECHNICAL PRODUCT SHEET

HERCULES SYNPAO

ISO 46, 68, 150



DESCRIPTION

HERCULES SYNPAO series is formulated using premium poly- α -olefin (PAO) base stocks combined with zinc-free anti-wear additives and highly refined oils, specifically designed for high-pressure air compressors. The PAO technology provides exceptional flow properties, ensuring easy circulation even at temperatures as low as -42°C , while delivering optimum performance under extreme operating conditions. This advanced formulation guarantees superior thermal stability, extended service life, and reliable protection across a wide temperature range.

APPLICATIONS

HERCULES SYNPAO series is recommended for compressors where long-lasting, efficient, and reliable performance is essential. It is ideally suited for wet and dry rotary screw and vane air compressors operating under severe conditions, including high temperatures (above 100°C) and pressures exceeding 15 bar. This advanced formulation ensures optimal protection and performance in demanding environments.

SPECIFICATIONS

DIN	515506 VDL
ISO	6743-3 (ISO-L-DAG, ISO-L-DAH, IS-L-DAJ)

PROPERTIES

HERCULES SYNPAO series offers outstanding oxidation resistance and excellent anti-wear protection, combined with a high viscosity index and low volatility for stable performance. Provides effective foam control with rapid air release and superior water separation. Fully compatible with mineral-based compressor oils and most seal materials, except Buna S, butyl, EPDM, EPR, and natural rubber when used with PAO formulations.

BENEFITS

HERCULES SYNPAO series keeps compressors exceptionally clean by minimizing deposit build-up on pressure spaces and valves, improving overall efficiency. Ensures low oil consumption for better air quality, reduced fire and explosion risks, and extended machine life. Offers superior rust and wear protection, prolonging oil service intervals. Compatible with different lubricants without risk, while reducing leaks and supporting a wide range of applications.



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PHYSICAL-CHEMICAL CHARACTERISTICS

HERCULES SYNPAO	METHOD	ISO 46	ISO 68	ISO 150
Density at 15°C, g/cm ³	ASTM D4052	0.847	0,843	0.856
Viscosity, Kinematic (cSt) 40°C	ASTM D445	46	68	150
Viscosity, Kinematic (cSt) 100°C	ASTM D445	8.0	10.1	11.5
Viscosity index	ASTM D2270	132	136	177
Flash point, COC, °C	ASTM D92	230	250	245
Pour point, °C	ASTM D97	-42	-42	-48
Copper corrosion	ASTM D 130	1a	1a	1a
FZG (A/8.3/90)	DIN 51352	>12	>12	>12
Demulsibility, min.	ASTM D1401	10	10	15

The above mentioned characteristics represent mean values.

STORAGE

All packages must be stored in covered, well-ventilated areas. If outdoor storage cannot be avoided, barrels must be placed horizontally to prevent water ingress and to protect labels and markings from damage. Products must not be stored at temperatures above 60 °C and must not be exposed to direct sunlight, freezing conditions, or extreme temperature fluctuations.



HEALTH & SAFETY

This product is not considered to pose significant risks to health or safety when used as intended and in accordance with recommended personal hygiene practices. It must not be applied for purposes other than those for which it has been formulated. For detailed guidance on safe handling and use, refer to the Safety Data Sheet (SDS).



USED OILS

Used lubricants must be collected at designated collection points to prevent environmental contamination. They must not be mixed with solvents, brake fluids, or antifreeze.

