

Airtop DI 46

Synthetic di-ester based compressor lubricant

Description

Airtop DI is a combination of high grade synthetic ester base fluids and specially engineered additive systems. They are used successfully for the long term lubrication all kinds of compressors, such as screw, rotary vane or reciprocating (piston type), roots (lobe), claw etc. vacuum pumps.

Airtop DI synthetic compressor lubricants can be used successfully in presence of various gases (see table below).

The nominal operating range is -15°C to 230°C . Airtop DI series synthetic compressor lubricant offer high performance protection of machines operating under extreme conditions: high load and temperatures, compressing reactive and dirty gases, intermittent operation, in warm or cold climates and in mobile applications.

Benefits

Airtop DI has a multitude of advantages over mineral oils and other synthetic oils:

- Reduced compressor maintenance with very long drain intervals. Up to 8 times the service life of mineral oils.
- Low friction properties and resistance to viscosity increase from oxidation. This helps to improve operating efficiency and saves money
- Excellent foam control, reducing heat, oxidation and wear. High contact regions are protected against wear for increased equipment life and efficiency on electrical energy consumption.
- Enhanced water separation. Water from condensation can cause unwanted oil/water emulsions, environmental discharge hazards

and rust. Airtop DI synthetic compressor lubricants resists acid formation, readily separate from water and is anti-rust fortified. Water can be easily drained off for simplified environmental discharge and increased oil life.

- Increased resistance to varnish, carbon and acid formation. Providing better protection and longer service life than petroleum oils, especially during hot operating conditions.
- Low volatility, resulting in lower evaporation losses and fewer problems with the oil getting into air tools, instruments or even the production process. It also means there is less oil to remove in the air/oil separators and fewer air filter changes.
- Fire and explosion possibilities are greatly reduced due to the low carbon forming tendencies and due to the relatively high flash, fire and auto ignition points.
- Operating temperature reduction. Airtop DI synthetic compressor lubricants cool and remove heat more efficiently.

These benefits mean for the user of Airtop DI synthetic compressor lubricants: higher reliability and lower operational costs. The reliability is also supported by our own oil analysis program.

Applications

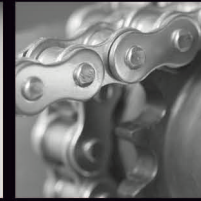
Lubrication of screw, rotary and reciprocating air and gas compressors. May as well be used as vacuum pump oil and ashless technology hydraulic oil.

Performance level

Meets the specification of DIN 51506 VDL and ISO 6743-3A DAJ.
DIN 51524/2.

All performance data on this Technical Data Sheet are indicative only and can vary during production

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Gas type suitability

Airtop DI is suitable for successfully pumping the following gas types:

Air	CO ₂ (dry)	H ₂ S (dry)	Propane
Butadiene	Ethylene	Natural gas	Synthesis gas
Carbon monoxide	Helium	Methane	SF ₆
Furnace gas	Hydrogen	Nitrogen	Halogen compounds
	NO _x		

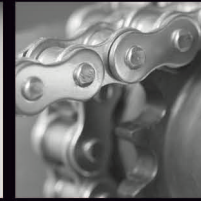
Material compatibility

This information is, to our best knowledge, true and accurate, but all recommendations and suggestions are made without guarantee, since the conditions of use are beyond our control. When unsure of a component's precise identity or version, the manufacturer should be consulted to determine its compatibility. Test can be performed by Matrix to check compatibility issues.

Recommended	Not Recommended
Viton	Neoprene
High nitrile NBR	SBR
PTFE	Low nitrile NBR
Epoxy Paint	Acrylic paint
Oil resistant alkyd	Lacquer
Polyamid	Polystyrene
Delrin, Celcon	PVC
PET/PBT	ABS

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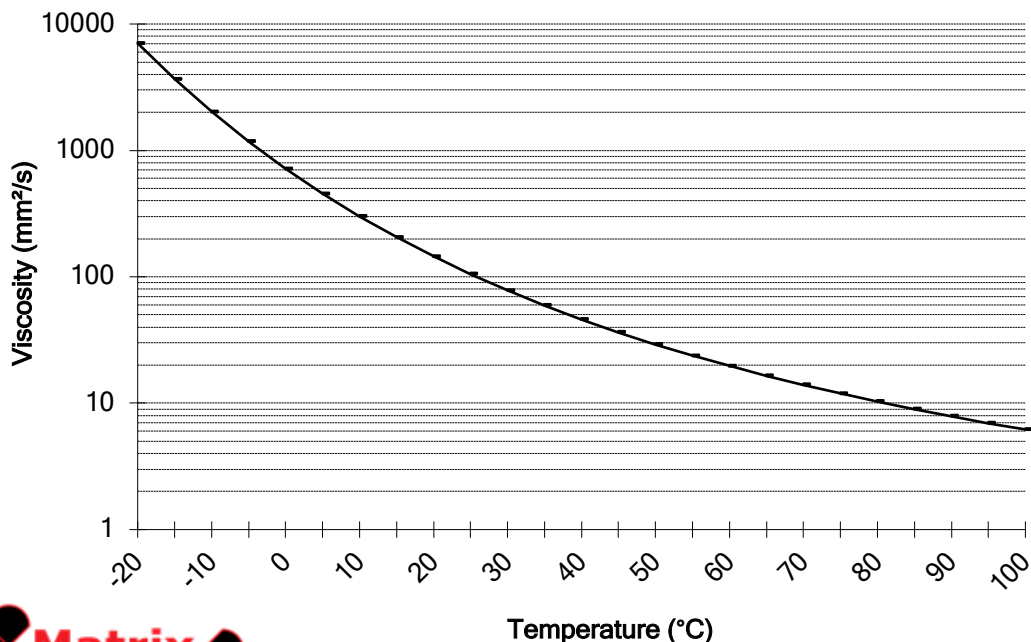
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Typical performance data

Airtop DI 46 Synthetic di-ester based compressor lubricant

Property	Test method	DI 46
ISO Viscosity Grade	ASTM D-2422	46
Viscosity Index	ASTM D-2270	73
Viscosity @ 40 °C, mm ² /s	ASTM D-445	46
Viscosity @ 100 °C, mm ² /s	ASTM D-445	6.2
Flash point, COC, °C	ASTM D-92	250
Pour point, °C	ASTM D-97	-54
Demulsibility	ASTM D-2711	excellent
Evaporation 22 hrs@ 99 °C, wt % g/10g	ASTM D-972	<1
Copper corrosion	ASTM D-130	1a
Density @ 15 °C, kg/l	ASTM D-1298	0.95



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