

Shell Corena Oil AS

Advanced synthetic compressor lubricant



Shell Corena AS is an advanced air compressor lubricant, capable of giving the best available performance in any oil-flooded air compressor of screw or vane design. Based on selected synthetic base fluids, Corena AS provides long oil life and effective lubrication in machines working in extremes of temperature and working conditions.

Applications

- **Rotary sliding vane and screw air compressors**
Oil flooded single and two-stage compressors, in particular those operating with higher output pressures of up to 20 bar and with air discharge temperatures higher than 100°C (including intermittent operation under these conditions).
- **Equipment running under arduous conditions**
May also be used where exceptionally high ambient temperatures are found, when the oil temperature cannot be reduced to normal levels.
- **ABB Turbochargers**
Recommended for use in ABB turbochargers fitted to low and medium speed diesel engines used in marine and power generation applications.

Advice on applications not covered in this leaflet may be obtained from your Shell representative.

Performance Features and Advantages

- **Excellent resistance to oxidation**
Resist the formation of carbon deposits and the formation of sludge in all moving parts of sliding vane and screw compressors to ensure maximum output of the machine throughout the service interval.
- **Extended oil drain intervals**
Oil drain intervals can be extended up to 8000 hours.
- **Excellent low volatility characteristics**
Low volatility giving low oil consumption and reduced top-up rates.
- **Very good surface properties**
Resulting in a low foaming tendency and very good water shedding properties. This helps to separate oil from air and water in two-stage compressor intercoolers, oil/water separators and drier units.

- **High viscosity index**
Reduced change of viscosity with change in operating temperature in comparison to conventional mineral oil-based products. This provides low starting viscosity together with higher viscosity at operating temperature.
- **Very good rusting and wear protection**
Effectively protects all metal surfaces from corrosion. Protects all sensitive machinery parts, e.g. gears, screws, bearings, from wear and prolongs the service intervals.

Specification and Approvals

ISO 6743-3A-DAJ

Corena AS 68 fulfils the requirements of ABB VTR 184..714 "Special low friction synthetic oil" with a maximum oil change interval of 5000 hours (HZTL 90617, List 3).

Miscibility

Corena AS is fully miscible with mineral oils, although dilution with mineral lubricants will markedly reduce its performance. Care must be taken to ensure that Corena AS is not mixed with other synthetic fluids.

Seal compatibility

Corena AS is compatible with all sealing materials commonly used in air compressors.

Health and Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

Protect the environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Typical Physical Characteristics

Corena AS			32	46	68
ISO Viscosity Grade		ISO 3448	32	46	68
Kinematic Viscosity		ASTM D445			
at 40 °C	mm ² /s		32	46	68
at 100 °C	mm ² /s		6,3	8	11,2
Density at 15 °C	kg/m ³	ASTM D1298	851	854	859
Flash point (COC)	°C	ASTM D92	230	235	240
Pour Point	°C	ASTM D97	-33	-33	-33
Viscosity Index (VI)		DIN ISO 2909	145	145	148
Rust prevention properties		ASTM D665-B	pass	pass	pass
Water separability	min	ASTM D 1401	10	15	15
FZG test	load stage failure	CEC-L-07-A-85	11	11	12

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.