Shell Corena Oil P

High performance lubricant for reciprocating air compressors

Shell Corena P is a premium quality reciprocating air compressor lubricant. It is based on a blend of specially selected base oils to provide a level of performance approaching that of synthetic oils.

Applications

- ***Reciprocating air compressors***
  Industrial reciprocating air compressors operating with air discharge temperatures of up to 220°C.
- ***Breathing air compressors***
  Corena P may be used in breathing air compressors, provided subsidiary clean-up apparatus is used to ensure that the air produced is fit for breathing.

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

Performance Features and Advantages

- ***Prolonged service intervals***
  Allows the interval between valve and piston maintenance to be extended. Compressors can be kept in service for much longer periods, operating at a consistently high level of efficiency.
- ***Safe air lines***
  In discharge air-lines, the combination of rust particles, dispersed in carbonaceous deposits, coupled with heat from recently compressed air, can cause an exothermic reaction leading to the possibility of fires and explosion. Corena P helps to minimise the likelihood of this danger arising.
- ***Very good oxidation resistance***
  Resistant to the formation of carbon deposits and lacquer on valves and piston crowns, caused by the by-products of corrosion, such as ferric oxides and hydroxides, at high working temperatures and pressures. Such deposits can cause serious damage, lower compressor efficiency and increase maintenance costs.
- ***Very good rusting and wear protection***
  Effectively protects all metal surfaces from corrosion. Protects all sensitive machinery parts, e.g. housings, valves, bearings, from wear and prolongs the service intervals.
- ***Very good air release and anti-foam properties***
  The careful choice of additives ensures rapid air release without excessive foaming.
- ***Very good water separation properties***
  Corena P separates readily from water allowing excess water to be drained from the oil circulation system, thus preventing accelerated corrosion and a reduction in lubrication efficiency. This also helps to separate oil from condensate in oil/water separators and drier units.

Specification and Approvals

DIN 51506 VDL
ISO 6743-3:2003 DAA Normal Duty

Seal compatibility

Corena P 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 P			**68**	**100**	**150**
ISO Viscosity grade		ISO 3448	68	100	150
Performance Standard		DIN 51506	VDL 68	VDL 100	VDL 150
Kinematic viscosity		ASTM D445			
at 40°C	mm^2/s		68	100	155
at 100°C	mm^2/s		7.8	9.2	12.1
Density at 15°C	kg/m^3	ASTM D1298	883	899	902
Flash point (COC)	°C	ASTM D92	235	240	240
Pour point	°C	ASTM D97	-33	-33	-30
Neutralisation value	mg KOH/g	ASTM D974	0.3	0.3	0.3
Sulphated ash	%m	DIN 51575	0.06	0.06	0.06
Oxidation stability (delta-CCR)	%m	DIN 51352-2	1.8	2	2.3
Properties of the distillation					
residue (20 %)					
Carbon residue (CCR)	%m	DIN 51551	0.3	0.3	0.3
Kinematic viscosity at 40°C	mm^2/s	DIN 51562	100	160	280
Rust prevention (steel)	degree	ASTM D665	Pass	Pass	Pass
Water separability		ASTM D1401			
at 54°C	min	ASTM D1401	30	-	-
at 82°C	min		-	20	20

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