



# Shell Corena 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.

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### **Main Applications**

#### ***Reciprocating air compressors***

Industrial reciprocating air compressors operating with air discharge temperatures of up to 220 C.

#### ***Breathing air compressors***

Corena AP may be used in breathing air compressors, provided subsidiary clean-up apparatus is used to ensure that the air produced is fit for breathing. Corena P 150 is approved for use in Bauer breathing air compressors.

### **Performance Features**

#### ***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.

### **Performance Specifications**

DIN 51506 VDL  
ISO 6743-3A-DAB

Corena P 150 is approved by Bauer and is included in the "Bauer reference oil list for breathing air compressor lubricants".

## Performance Benefits

### **Improved Compressor Efficiency & Lower Maintenance Costs**

- Good oxidation stability results in deposits in the compressor and discharge systems being minimised which means that maintenance intervals can potentially be extended
- Compressor efficiency is maintained over long periods
- Water can be readily drained from the system
- Meets the requirements of leading air compressor manufacturers
- Compatible with all seal materials used by compressor manufacturers
- Suitable for use in compressors producing breathing air

## Advice

### **Seal compatibility**

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

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

## Health & Safety

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

## Typical Physical Characteristics

Shell Corena P			68	100	150
<b>ISO Viscosity grade</b>		ISO 3448	68	100	150
<b>Performance Standard</b>		DIN 51506	VDL 68	VDL 100	VDL 150
<b>Kinematic viscosity</b>		ASTM D445			
at 40°C	mm <sup>2</sup> /s		68	100	155
at 100°C	mm <sup>2</sup> /s		7.8	9.2	12.1
<b>Density at 15°C</b>	kg/m <sup>3</sup>	ASTM D1298	883	899	902
<b>Flash point (COC)</b>	°C	ASTM D92	235	240	240
<b>Pour point</b>	°C	ASTM D97	-33	-33	-30
<b>Neutralisation value</b>	mg KOH/g	ASTM D974	0.3	0.3	0.3
<b>Sulphated ash</b>	%m	DIN 51575	0.06	0.06	0.06
<b>Oxidation stability (delta-CCR)</b>	%m	DIN 51352-2	1.8	2	2.3
<b>Carbon residue (CCR)</b>	%m	DIN 51551	0.3	0.3	0.3
<b>Kinematic viscosity at 40°C</b>	mm <sup>2</sup> /s	DIN 51562	100	160	280
<b>Rust prevention (steel)</b>	degree	ASTM D665	0-A	0-A	0-A
<b>Water separability</b>		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.