



Previous Name: **Shell Corena P**

Shell Corena **S2 P**

Reciprocating (Piston) Air Compressor Oil

- **RELIABLE PROTECTION**
- **STANDARD LIFE APPLICATIONS**

Shell Corena S2 P is high quality air compressor oil designed to deliver the lubrication performance for high pressure reciprocating compressors. It is suitable for most reciprocating air compressors running at up to 220°C discharge temperatures at elevated pressures.

Performance Benefits

- **Long oil life – Maintenance saving**

Shell Corena S2 P allows the interval between valve and piston maintenance to be extended under certain applications. Compressors can be kept in service for much longer periods, operating at a consistently high level of efficiency.

Extended maintenance capability is supported by resistance to formation of carbon deposits and lacquer on valves and piston crowns at high working temperatures and pressures.

- **Outstanding wear protection**

Shell Corena S2 P helps provide effective protection of internal metal surfaces from corrosion and wear to help prolong the life of critical parts such as bearings and pistons.

- **Maintaining system efficiency**

Shell Corena S2 P helps prevent the formation of carbon deposits and lacquer on valves and piston crowns at high working temperatures and pressures. These can cause serious damage, lower compressor efficiency and increase maintenance costs.

In addition, Shell Corena S2 P has good water separation to help prevent accelerated corrosion and facilitating easy draining of condensate.

- **Enhanced air line safety**

In discharge air-lines, the combination of rust particles, dispersed in carbonaceous deposits, coupled with heat from recently compressed air, can cause a reaction leading to the possibility of fires and explosion. Shell Corena S2 P helps to minimise the likelihood of this danger.

Applications

- **Reciprocating air compressors**

Shell Corena S2 P is suitable for use in industrial reciprocating air compressors operating with air discharge temperatures of up to 220°C.

- **Breathing air compressors**

Shell Corena S2 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.

Specifications and Approvals

Shell Corena S2 P meets the requirements of:

ISO 6743-3A-: DAA Normal Duty

Health and Safety

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

Seal Compatibility

Shell Corena S2 P oils are compatible with all sealing materials commonly used in air compressors.

Protect the Environment

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



Advice

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

Typical Physical Characteristics

Shell Corena S2 P				68	100	150
ISO Viscosity Grade		ISO 3448	68	100	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.



Viscosity - Temperature Diagram for Shell Corena S2 P

