



Previous Name: **Shell Corena S**

# Shell Corena **S3 R**

## Premium Rotary Air Compressor Oil

- **LONG LIFE**
- **IMPROVED EFFICIENCY**

Shell Corena S3 R is a premium quality air compressor oil designed to deliver high performance lubrication of rotary sliding vane and screw air compressors. It uses an advanced additive system to provide excellent protection and performance for compressors running at up to 20 bar and 100°C discharge temperatures with oil maintenance intervals of up to 6000 hours.

### Performance Benefits

- **Long oil life – Maintenance saving**

Shell Corena S3 R is capable of providing oil maintenance intervals of up to 6000 hours (where allowed by manufacturers) even when operating at maximum discharge temperatures of up to 100°C.

It is formulated to help:

- Resist formation of carbon deposits in sliding vane slots in vane compressors
- Resist formation of deposits on rotating components in screw compressors.
- Resist thermal breakdown and deposit formation to maintain excellent internal surface cleanliness particularly in oil/air separator and coalescer systems.

Exact oil maintenance interval will depend on intake air quality, duty cycle and ambient conditions. For hot and humid type climates as found in the Asian and Pacific regions, a reduced oil drain period is recommended (consult OEM recommendations)

- **Outstanding wear protection**

With many years of successful application, Shell Corena S3 R helps provide effective protection of internal metal surfaces from corrosion and wear. It contains an advanced ashless anti-wear system to help prolong the life of critical parts such as bearings and gears.

- **Maintaining system efficiency**

Air release and prevention of foaming are critical performance characteristics in a compressor oil, ensuring reliable start-up and continuous compressed air availability. Shell Corena S3 R is designed to provide rapid air release without excessive foaming to give trouble-free operation even under cycling conditions.

In addition, Shell Corena S3 R has excellent water separation properties to help ensure continuous efficient operation of the compressor even in the presence of water.

### Applications

- **Rotary sliding vane air compressors**

Shell Corena S3 R is suitable for oil-flooded or oil-injected vane compressors, operating at pressures of up to 10 bar and with air discharge temperatures of up to 100°C.

- **Screw air compressors**

Suitable for oil flooded or oil injected, single or two-stage rotary compressors, operating at pressures of up to 20 bar and with air discharge temperatures of up to 100°C.

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

### Specifications and Approvals

Shell Corena S3 R meets the requirements of:  
ISO 6743-3A-DAJ



## 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 S3 R oils are compatible with seal materials specified for use with mineral oils.

## 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 S3 R			32	46	68
ISO Viscosity Grade	ISO 3448		32	46	68
Kinematic viscosity	ASTM D445				
at 40 °C	mm <sup>2</sup> /s		32	46	68
at 100 °C	mm <sup>2</sup> /s		5.4	6.9	8.9
Density at 15 °C	kg/m <sup>3</sup>	ASTM D1298	864	868	873
Flash point COC	°C	ASTM D92	218	230	248
Air Release	minutes	ASTM D3427	2	3	5
RPVOT	minutes	ASTM D2272	700	700	700
FZG	LS Fail	CEC-L-07-A-95	11	11	11
Pour point	°C	ASTM D97	-30	-30	-30
Water separability		ASTM D 1401			
at 54 °C	minutes		15	15	15

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 S3 R

