

# Shell Corena S3 RX 32

#### **Technical Data Sheet**

- · Long life
- · System efficiency
- Severe applications

#### Premium Rotary Air Compressor Oil

Shell Corena S3 RX is a premium quality synthesized air compressor oil, based on Shell's advanced Gas-to-Liquids (GTL) base oil technology combined with an advanced performance additive system. It is designed to provide excellent protection and performance for compressors running with oil change intervals of 6,000 hours and up to 8,000 hours under certain conditions.

# **DESIGNED TO MEET CHALLENGES**

#### Performance, Features & Benefits

#### · Long oil life - Maintenance saving

Shell Corena S3 RX is capable of providing oil change intervals of 6,000 hours (based on OEM's recommended maintenance interval) even when operating at discharge temperatures in excess of 100°C. This may be extended up to 8,000 hours under certain conditions.

The advanced formulation of Shell Corena S3 RX helps to deliver long oil life though:

- Enhanced resistance to thermal and oxidative chemical breakdown.
- Resistance to formation of deposits especially on rotating components in screw compressors and in sliding vane
- Very low levels of deposit formation to help maintain internal surface cleanliness, particularly in oil/air separator and coalescer systems.

The exact oil change interval will depend on intake air quality, duty cycle and ambient conditions. For hot and humid type climates, the lower oil drain period of 6,000 hours is recommended (also consult OEM recommendations).

# · Outstanding wear protection

Shell Corena S3 RX 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

Shell Corena S3 RX is designed to provide exceptional air release and low foaming tendency to give trouble-free operation even under cycling conditions, helping to ensure reliable start-up and continuous compressed air availability.

Shell Corena S3 RX is formulated with Shell's gas-to-liquids (GTL) base oil technology, resulting in very low volatility and oil carryover to provide low oil top-up requirements in combination with increased air quality.

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

#### **Main Applications**









Rotary sliding vane and screw air compressors
Shell Corena S3 RX is suitable for use in both oil-flooded/ oil injected rotary compressors and sliding vane compressors.

# Specifications, Approvals & Recommendations

• ISO 6743-3:2003 L-DAJ

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

#### Compatibility & Miscibility

# Miscibility

Shell Corena S3 RX is fully miscible with mineral oils, although dilution with mineral lubricants will markedly reduce its performance. Care must be taken to avoid mixing Shell Corena S3 RX with certain other types of synthetic fluids expecially fluids on PAG basis. Contact your Shell representative for further information.

#### Seal Compatibility

Shell Corena S3 RX is compatible with seal materials specified for use with mineral oils.

# **Typical Physical Characteristics**

Properties			Method	Shell Corena S3 RX 32
ISO Viscosity Grade			ISO 3448	32
Kinematic Viscosity	@40°C	cSt	ASTM D445	32
Kinematic Viscosity	@100°C	cSt	ASTM D445	6.0
Viscosity Index			ISO 2909	136
Density	@15°C	kg/m³	ASTM D1298	833
Flash Point (COC)		°C	ASTM D92	250
Pour Point		°C	ASTM D97	-40
FZG Test		LS Fail	CEC-L-07-A-95	10
NOACK Volatility Test	@250°C	%m/m	CEC-L-40-93B	6.4
Air Release	50°C	minutes	ASTM D3427	1.4
Water Separability	54°C	minutes	ASTM D1401	15

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

# Health, Safety & Environment

#### · Health and Safety

Shell Corena S3 RX is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from http://www.epc.shell.com/

#### · Protect the Environment

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

#### **Additional Information**

# Advice

Advice on applications not covered here may be obtained from your Shell representative.

Viscosity - Temperature Diagram for Shell Corena S3 RX

