

Shell Omala RL

Synthetic bearing and circulation oil



Shell Omala RL is a high performance synthetic bearing and circulation lubricant, based on synthesized hydrocarbon fluids. It offers outstanding lubrication performance under severe operating conditions, including improved energy efficiency and long service life.

Applications

- **Moderately loaded enclosed industrial reduction gearboxes operating under arduous conditions, such as very low or elevated temperatures and wide temperature variations**
- **Particularly recommended for certain 'lubricated-for-life' systems**
- **Plain and rolling element bearings**
- **Oil circulation systems**
- **Outstanding rust and corrosion protection of all metal surfaces**
- **Rapid water shedding and air release performance**

Performance Features and Benefits

- **Excellent anti-wear performance providing long component life**
Provides high levels of wear protection for rolling element bearings and moderately loaded gearboxes, providing benefits over mineral oil-based products in terms of gear and bearing component life.
- **Excellent oxidation and thermal stability extending lubricant life**
Resists the formation of harmful products of oxidation at high operating temperatures, improving system cleanliness and therefore reliability of the equipment.
- **Longer service intervals**
Extended component and lubricant life offers the opportunity to extend service intervals and to reduce maintenance and disposal costs.
- **Superior lubricant performance improving gear efficiency**
Offers improved low temperature performance and reduced change in viscosity with increase in temperature in comparison to mineral oil-based products. This provides better lubrication at low start-up temperatures and the opportunity for energy savings by optimising the viscosity for normal operating conditions.

Specification and Approvals

Meets the ISO 12925-1 Type CKS specification.

Seal and paint compatibility

Omala RL is compatible with all seal materials and paints normally specified for use with mineral oils.

Change over procedure

Omala RL is compatible with petroleum mineral oils and no special change-over procedure is necessary. However, to realise the full benefits for Omala RL, it should not be mixed with other oils. It is also advisable to ensure that oil systems are clean and free from contamination to optimise potential service life.

Advice

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

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

Omala RL		32	68	100
ISO Viscosity Grade	ISO 3448	32	68	100
Kinematic Viscosity	ISO 3104			
at 40°C	mm ² /s	32	68	100
at 100°C	mm ² /s	5.50	7.70	12.8
Viscosity Index	ISO 2909	125	130	130
Flash Point COC	°C ISO 2592	246	254	282
Pour Point	°C ISO 3016	-54	-54	-54
Density at 15°C	kg/m ³ ISO 12185	855	857	859
FZG Load Carrying Test	DIN 51354-2			
Failure load stage	A/8.3/90	>12	>12	>12

Omala RL		150	220	320
ISO Viscosity Grade	ISO 3448	150	220	320
Kinematic Viscosity	ISO 3104			
at 40°C	mm ² /s	150	220	320
at 100°C	mm ² /s	19.8	25.9	33.8
Viscosity Index	ISO 2909	149	149	148
Flash Point COC	°C ISO 2592	236	240	270
Pour Point	°C ISO 3016	-54	-48	-45
Density at 15°C	kg/m ³ ISO 12185	848	853	854
FZG Load Carrying Test	DIN 51354-2			
Failure load stage	A/8.3/90	>12	>12	>12

Omala RL		460	680	1000
ISO Viscosity Grade	ISO 3448	460	680	1000
Kinematic Viscosity	ISO 3104			
at 40°C	mm ² /s	460	680	1000
at 100°C	mm ² /s	45.5	61.9	84.7
Viscosity Index	ISO 2909	155	160	167
Flash Point COC	°C ISO 2592	274	286	286
Pour Point	°C ISO 3016	-42	-39	-36
Density at 15°C	kg/m ³ ISO 12185	855	857	859
FZG Load Carrying Test	DIN 51354-2			
Failure load stage	A/8.3/90	>12	>12	>12

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