



Previous Name: Shell Omala RL

Shell Morlina S4 B 150

- Extra Life and Protection
- Severe Applications

Advanced Bearing & Circulating Oils

Shell Morlina S4 B oils are high performance synthetic bearing and circulation lubricants, based on high performance base fluids. They offer outstanding lubrication performance under severe operating conditions, including improved energy efficiency and long service life even in severe operating conditions.

Performance, Features & Benefits

■ Long oil life - maintenance saving

The use of highly stable synthetic base oils in conjunction with a robust rust and oxidation inhibitor package helps provide excellent oxidation and thermal stability. This provides Shell Morlina S4 B with extending maintenance capability compared to conventional oils.

In addition it resists the formation of harmful products of oxidation at high operating temperatures, to help maintain system cleanliness and therefore reliability of the equipment.

■ Excellent wear and corrosion protection

Shell Morlina S4 B has been formulated to provide excellent anti-wear performance and provides high levels of wear protection for plain and rolling element bearings and moderately loaded gearboxes, compared to mineral oil-based products. This helps provide superior gear and bearing component life.

In addition it also provides outstanding rust and corrosion protection of all metal surfaces.

■ Enhancing system efficiency

Shell Morlina S4 B can help improve the efficiency of lubrication in bearing and circulating systems. The superior low temperature performance and reduced change in viscosity with increase in temperature in comparison to mineral oil-based products provides better lubrication at low start-up temperatures and the opportunity for energy savings through reduced pumping and flow losses during normal operating conditions.

Rapid water shedding and air release properties further enhance the efficiency of the lubrication system by helping maintain critical oil films between loaded components.

Main Applications



■ Severe operating conditions

Shell Morlina S4 B is recommended for systems including moderately loaded gearboxes, operating under severe conditions such as low or high temperatures or with wide temperature variations.

■ Lubricated for life systems

The long oil life of Shell Morlina S4 B makes it suitable for use in certain 'lubricated-for-life' systems.

■ Bearing and circulating oil systems

Suitable for use in systems containing plain or rolling element bearings, including those highly loaded bearings found in such as those found in cement or quarrying applications.

Specifications, Approvals & Recommendations

- Alfa Laval Group D gearbox applications
- Aerzen Maschinenfabrik GmbH Blower Applications
- Baltimore Aircoil Gear Boxes
- Cincinnati Machine Various P applications
- David Brown Table H applications
- Emerson Power Transmission
- GEA Westfalia Separator GmbH
- Renold Gears (various applications)
- Sharpe E-series worm gear reducers
- Winsmith (Peerless-Winsmith Inc) worm gear reducer
- ISO 12925-1 Type CKS specification

For additional questions regarding equipment approvals and recommendations, please consult your local Shell Technical Helpdesk, or the OEM Approvals website.

Shell Morlina S4 B is compatible with petroleum mineral oils and no special change-over procedure is necessary. However, to realise the full benefits, it should not be mixed with other oils.

It is also advisable to ensure that oil systems are clean and free from contamination to optimize potential service life.

Compatibility & Miscibility

■ Seal & Paint Compatibility

Shell Morlina S4 B is compatible with all seal materials and paints normally specified for use with mineral oils.

■ Change-over Procedure

Typical Physical Characteristics

Properties			Method	Shell Morlina S4 B
Viscosity Grade			ISO 3448	150
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	150
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	19.8
Viscosity Index (VI)			ASTM D2270	149
Flash Point			°C ASTM D92 (COC)	236
Pour Point			°C ASTM D97	-54
Density	@15°C	kg/m ³	ASTM D4052	848
Emulsion Test			mins ASTM D1401	15
Foam Test, Seq II			ml foam '@0/10 mins ASTM D892	0/0
FZG Load Carrying Test			failure load stage DIN 51354-2 A/8.3/90	>12

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

Health, Safety & Environment

- 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

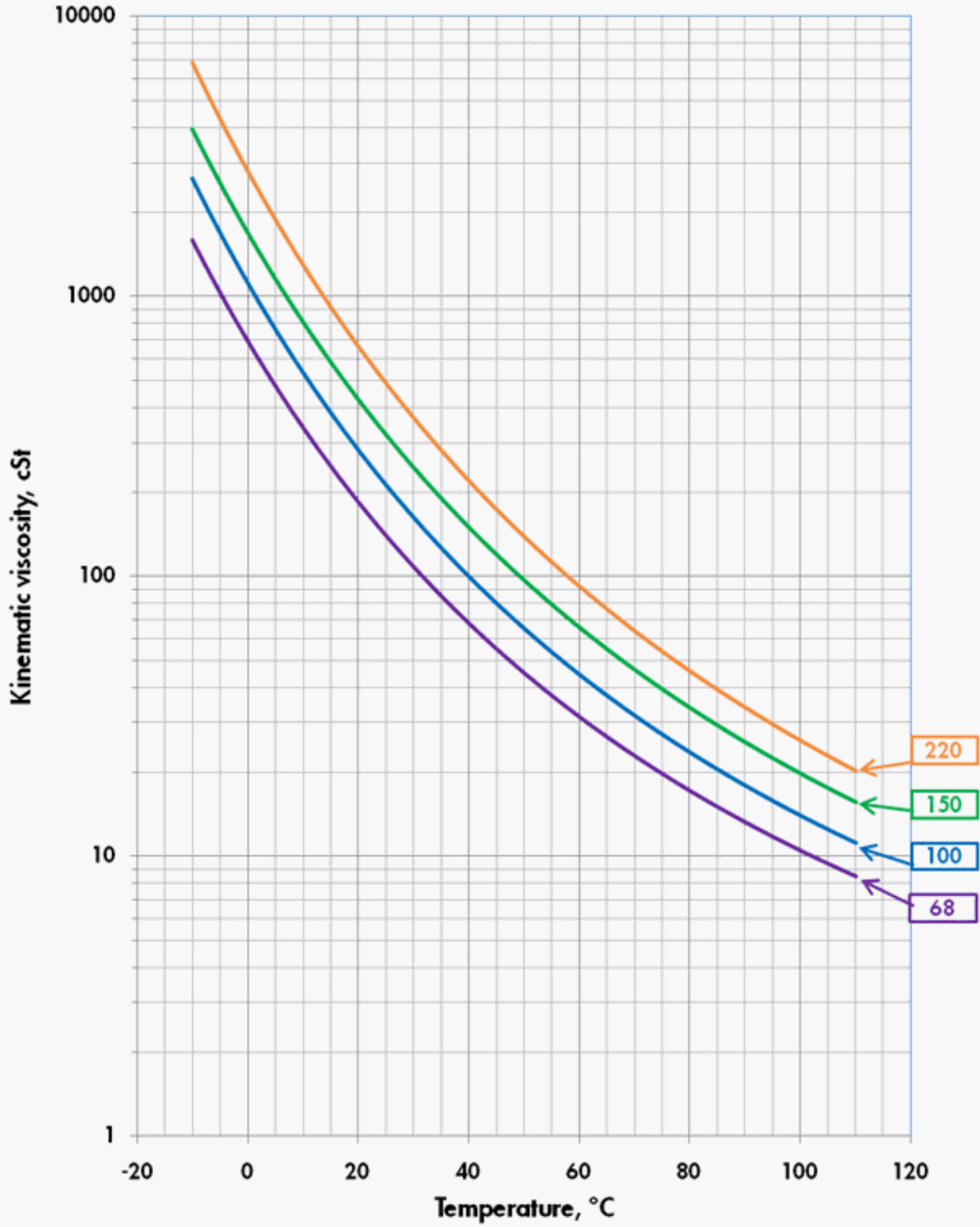
Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

Additional Information

■ Advice

Product recommendations for applications and specifications not covered here may be obtained from your Shell representative.

Viscosity - Temperature Diagram for Shell Morlina S4 B



Viscosity - Temperature Diagram for Shell Morlina S4 B

