



Previous Name: **Shell Morlina HS Oils**

Shell **Morlina S2 BL**

Special Application Bearing & Circulating Oils

- **RELIABLE PROTECTION**
- **HIGH SPEED APPLICATIONS**

Shell Morlina S2 BL oils are special low viscosity, solvent refined mineral oil blended with zinc free additives, to provide extended performance in the high speed spindles of machine tools.

Performance Benefits

- **Long oil life – Maintenance saving**

Shell Morlina S2 BL oils are formulated with a well proven rust and oxidation inhibitor package that provides high resistance to oxidation, caused by heat in the presence of air, water and metal catalysts, such as copper, and helps to prolong oil life and lower maintenance costs.

- **Reliable wear & corrosion protection**

The special additives provide efficient anti-wear performance without reacting to the softer metals in bearings and enhance machine reliability. In addition the additive package enhances the oil's natural corrosion protective properties and helps to prolong bearing life.

- **Maintaining system efficiency**

The low viscosity components of these oils have been chosen to help promote the smooth running of high speed machine elements and minimize heat build up through frictional energy losses.

Applications

- **Machine bearing and circulating systems**

Suitable for a range of machine lubrication systems that include oil lubricated plain and rolling element bearings.

- **High speed spindles**

The low viscosity fluids (ISO grades 2, 5, and 10) are particularly suitable for the lubrication of high speed spindles in machine tools.

Paint Compatibility

Shell Morlina S2 BL oils are compatible with seal materials and paints normally specified for use with mineral oils.

Specification and Approvals

Shell Morlina S2 BL oils are designed to meet specifications requiring a premium quality, light viscosity oil for applications running at high speeds such as those found in high speed frames and automated machine tools.

Cincinnati Machine P-65 (ISO VG 2)

Cincinnati Machine P-62 (ISO VG 5, 10)

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.

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 Marlina S2 BL			2	5	10	22
Viscosity Grade		ISO 3448	2	5	10	22
Kinematic Viscosity		ASTM D 445				
at 20°C	mm ² /s		2.9	-	-	-
at 40°C	mm ² /s		2	5	10	22
at 100°C	mm ² /s		-	-	2.3	4.2
Density at 15°C	kg/m ³	ISO 12185	806	869	881	870
Flash Point, COC	°C	ASTM D93	84	120	150	179
Pour Point,	°C	ISO 3016	<-45	-30	-30	-30
Rust, salt water		ASTM D665B	Pass	Pass	Pass	Pass
Oxidation Control Tests:						
(a) TOST, hrs		ASTM D943	2000+	2000+	2000+	2000+
(b) RPVOT, minutes		ASTM D2272	300	300	300	300

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