



Shell Morlina S2 BL 5

- Reliable Protection
- Long Oil Life
- High Speed Applications

Special Application Bearing & Circulating Oils

Shell Morlina S2 BL 5 uses special low viscosity Shell Gas-to-Liquid (GTL) technology blended with zinc free additives, to provide extended performance in the high speed spindles of machine tools.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Long oil life – Maintenance saving**

Shell Morlina S2 BL oils are formulated with a proven rust and oxidation inhibitor package that provides high resistance to oxidation, especially in hot and wet environments. They are also very resistant to breakdown from metal catalysts, such as copper. These characteristics prolong oil life and lower maintenance costs.

- **Reliable wear & corrosion protection**

The well-balanced additive package also provides efficient anti-wear performance without reacting to the softer metals in bearings, which enhances machine reliability. In addition, the additive package enhances the oil's natural corrosion protective properties and helps to prolong bearing life.

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- **Maintaining system efficiency**

The low viscosity components in 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.

Main 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**

Shell Morlina S2 BL 5 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.

Specifications, Approvals & Recommendations

- Fives Group Cincinnati P-62 (Very Light Spindle Oil) Morlina S2 BL 5 will meet the requirements of P-62.

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

Typical Physical Characteristics

Properties			Method	Shell Morlina S2 BL 5
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	5
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	1.9
Viscosity Index			ASTM D2270	120
Density	@15°C	kg/m ³	ISO 12185	806
Flash Point (COC)		°C	ASTM D92	115
Pour Point		°C	ASTM D5950	-42
Total Acid Number		mg KOH/g	ASTM D664	0.15
Rust, Salt Water			ASTM D665B	Pass
Water Separability	@54°C	minutes	ASTM D1401	5 (40/40/0)

Properties			Method	Shell Morlina S2 BL 5
4-ball Wear Scar	1hr/54°C/1800 rpm/20 kg	mm	ASTM D2266	0.4
Copper Corrosion	3 hours @ 100°C	Rating	ASTM D130	1a
Oxidation Control Test : TOST		Hrs to TAN=2.0 minimum	ASTM D943	7 500+
Oxidation Control Test : RPVOT		minutes	ASTM D2272	1 000

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 & Safety

This product 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 Safety Data Sheet, which can be obtained from <https://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.