Technical Data Sheet

Formerly Known As: **Shell Morlina 10, Shell Morlina HS 10**

Shell **Morlina** ***S2 BL 10***

- Reliable Protection
- High Speed Applications

Special Application Bearing & Circulating Oils

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.

DESIGNED TO MEET CHALLENGES

Performance, Features & 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.

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**

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

Specifications, Approvals & Recommendations

- Fives Cincinnati P-65 (ISO VG 2)
- Fives Cincinnati P-62 (ISO VG 5, 10)

  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.

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

Typical Physical Characteristics

Properties			Method	Morlina S2 BL 10
Kinematic Viscosity	@40°C	mm^2/s	ASTM D445	10
Kinematic Viscosity	@100°C	mm^2/s	ASTM D445	2.3
Density	@15°C	kg/m^3	ISO 12185	881
Flash Point (COC)		°C	ASTM D92	150
Pour Point		°C	ISO 3016	-30
Rust, Salt Water			ASTM D665B	Pass
Oxidation Control Test : TOST		Hrs	ASTM D943	2000+
Oxidation Control Test : RPVOT		Mins	ASTM D2272	300

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

- **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.