



Previous Name: Shell Morlina 22, Shell Morlina HS 22

# Shell Morlina S2 BL 22

- *Reliable Protection*
- *High Speed Applications*

## Special Application Bearing & Circulating Oils

Shell Morlina S2 BL oils are special low viscosity, solvent refined mineral oils 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

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 22 |       |
|--------------------------------|--------|--------------------|------------------|-------|
| Viscosity Grade                |        | ISO 3448           | 22               |       |
| Kinematic Viscosity            | @104°F | mm <sup>2</sup> /s | ASTM D445        | 22    |
| Kinematic Viscosity            | @212°F | mm <sup>2</sup> /s | ASTM D445        | 4.2   |
| density                        | @15°C  | kg/m <sup>3</sup>  | ISO 12185        | 870   |
| Flash Point (COC)              |        | °F                 | ASTM D 92        | 354   |
| Pour Point                     |        | °F                 | ISO 3016         | -22   |
| Rust, Salt Water               |        |                    | ASTM D 665B      | Pass  |
| Oxidation Control Test : TOST  |        | Hrs                | ASTM D 943       | 2000+ |
| Oxidation Control Test : RPVOT |        | Mins               | ASTM D 2272      | 300   |

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

### ▪ Health & Safety

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

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

