Technical Data Sheet

- Enhanced Stick Slip
- Outstanding wear protection
- Longer Oil Life
- Versatile Applications

Shell **Tellus** *S3 VS 46*

Hydraulic Fluid, High-Performance, HVLP, Enhanced Stick Slip

A high-performance zinc-based HVLP hydraulic fluid, with enhanced resistance to stick slip. A high viscosity index allows for reliable performance across a wide range of temperatures. Using proven zinc-based anti-wear technology it offers durable performance in mobile applications such as construction and mobile crane applications.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **System Efficiency**

  Shell Tellus S3 VS has been developed with optimised stick–slip performance and wear protection in mind. Stick–slip can be a problem for equipment performance, so the hydraulic oil used can help to deliver smoother operation. This helps operators to maintain precision and control, especially in long-boom equipment such as cranes.

  Shell Tellus S3 VS fluids have good resistance to thermal and chemical breakdown to ensure consistent performance and protection throughout the fluid drain interval, helping contribute to a longer oil life.

  Superior cleanliness in severe environments helps keep the hydraulic system functioning efficiently. This is supported by excellent air release and anti-foam characteristics. In addition, Shell Tellus S3 VS provides excellent filterability allowing the use of fine filters for extra protection and long equipment life.

- **Outstanding wear protection**

  Shell Tellus S3 VS is designed to meet the increasing demands on hydraulic systems , including excellent performance in the tough Denison T6H20C (dry and wet versions) and the demanding Danfoss Vickers 35VQ25, demonstrating how Shell Tellus S3 VS fluids can help system components last longer.

- **Versatile protection in severe environments**

  The established zinc based anti-wear technology in Shell Tellus S3 VS fluids provides extra protection in challenging environments by:

  Preventing corrosion in presence of water

  Providing low-friction anti-wear performance

  Providing superior stick slip performance

  In addition, the viscosity index helps ensure protection and performance from low-temperature start-up conditions to high temperature and severe duty operations. This product is designed to maintain viscosity even under high shear conditions.

Main Applications



Specifications, Approvals & Recommendations

- Denison Hydraulics (HF-0, HF-1 and HF-2)
- Danfoss Vickers E-FDGN-TB002-E
- ISO 11158 (HV fluids)
- DIN 51524-3 (HVLP oils)
- SS 15 54 34 AV (ISO VG 46 and 68)
- Swedish Standard SS 15 54 34 AAV
- JCMAS P041:2004 Normal Temperature and Low Temperature

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

Compatibility & Miscibility

- **Compatibility**

  Suitable for use with most hydraulic pumps.

- **Fluid Compatibility**

  Compatible with most other mineral oil based hydraulic fluids. However, mineral oil hydraulic fluids should not be mixed with other fluid types (e.g. environmentally acceptable or fire-resistant fluids).

- **Seal & Paint Compatibility**

  Compatible with seal materials and paints normally specified for use with mineral oils.

Typical Physical Characteristics

Properties			Method	Shell Tellus S3 VS 46
Form				Liquid at room temperature.
State of Matter				Liquid
Colour			Visual	amber
Density	@15°C	kg/m³	ISO 12185	854
Flash Point (COC)		°C	ISO 2592	240
Pour Point		°C	ISO 3016	-39
ISO Oil Type				L-HV
ISO Viscosity Grade			ISO 3448	46
Kinematic Viscosity	@40°C	cSt	ASTM D445	46
Kinematic Viscosity	@100°C	cSt	ASTM D445	8.38
Viscosity Index			ISO 2909	165

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

Shell Tellus S3 VS are manufactured with a Quality System assuring the fluid at the Shell plant filling lines meets the requirements of max ISO 4406 21/19/16 class.

- **Advice**

  Advice on applications not covered here may be obtained from your Shell representative.