



Previous Name: Shell Tellus TX

Shell Tellus S2 VX 22

Industrial hydraulic fluid for extra wide temperature range

- *Extra Protection*
- *Versatile Applications*
- *Cold Climate*

Shell Tellus S2 VX fluids are high performance hydraulic fluids designed to provide excellent viscosity control under severe mechanical stress and, with an extra high viscosity index, these oils can help provide outstanding protection and performance in most mobile equipment and other applications subjected to wide ranges of ambient or operating temperatures found in colder climates.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Long life fluid - maintenance saving**

Shell Tellus S2 VX fluids help extend equipment maintenance intervals by resisting thermal and chemical breakdown. This helps to minimize sludge formation and so provide better reliability and system cleanliness.

Shell Tellus S2 VX fluids also have good stability in the presence of moisture, which ensures long fluid life and reduces the risk of corrosion and rusting, particularly in moist or humid environments.

Highly shear stable viscosity modifiers help minimize variations in the fluid properties throughout the fluid drain interval.

- **Outstanding wear protection**

Proven zinc-based anti-wear additives are incorporated to be effective throughout the range of operating conditions, including low load and severe duty high load conditions. The highly shear stable viscosity index improver used in Shell Tellus S2 VX helps retain the critical high temperature viscosity to protect pumps under normal operating conditions whilst helping fluidity at low temperatures for protection on system cold start.

- **Maintaining system efficiency**

The extended temperature range capability of Shell Tellus S2 VX allows efficient operation of mobile equipment from cold start to normal operating conditions.

Superior cleanliness, excellent filterability and high performance water separation, air release and anti-foam characteristics all help contribute to maintaining or enhancing the efficiency of hydraulic systems.

The advanced additive system in Shell Tellus S2 VX, in combination with superior cleanliness (meeting the requirements of max ISO 4406 21/19/16 class, ex Shell filling lines, as recognized by DIN 51524 specification) helps reduce the impact of contaminants on filter blocking, allowing both extended filter life and use of finer filtration for extra equipment protection.

Shell Tellus S2 VX fluids are formulated for fast air release without excessive foaming to help efficient hydraulic power transfer and minimise fluid and equipment impacts of cavitation-induced oxidation that can shorten fluid life.

Main Applications



- **Mobile/external hydraulic applications**

Hydraulic and fluid power transmission systems in exposed environments can be subject to wide variations in temperature. The high viscosity index of Shell Tellus S2 VX helps deliver responsive performance from cold start conditions to full load, severe duty operation.

- **Precision hydraulic systems**

Precision hydraulic systems require excellent control of fluid viscosity over the operating cycle. Shell Tellus S2 VX provides greater temperature-viscosity stability compared to ISO HM fluids that can help improve the performance of such systems.

For more severe operating conditions, longer fluid life and enhanced efficiency, the Shell Tellus "S3" and "S4" ranges offer additional performance benefits.

Specifications, Approvals & Recommendations

- ISO 11158 (HV fluids)
- ASTM 6158-05 (HV fluids)
- DIN 51524 Part 3 HVLP type

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

Compatibility & Miscibility

• Compatibility

Shell Tellus S2 VX fluids are suitable for use with most hydraulic pumps. However, please consult your Shell Representative before using in pumps containing silver plated components.

• Fluid Compatibility

Shell Tellus S2 VX fluids are 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

Shell Tellus S2 VX fluids are compatible with seal materials and paints normally specified for use with mineral oils.

Typical Physical Characteristics

Properties		Method	Shell Tellus S2 VX 22
ISO Fluid Type		ISO 3448	HV
Kinematic Viscosity	@40°C cSt	ASMT D445	22
Kinematic Viscosity	@100°C cSt	ASTM D445	4.8
Dynamic Viscosity	@-20°C cP	ASTM D2983	680
Dynamic Viscosity	@-35°C cP	ASTM D2983	2567
Dynamic Viscosity	@-40°C cP	ASTM D2983	11480
Dynamic Viscosity	@-45°C cP	ASTM D2983	-
Viscosity index		ISO 2909	163
Density	kg/m ³	ISO 12185	859
Flash Point (Cleveland Open Cup)	°C	ISO 2592	166
Pour Point	°C	ISO 3016	-51

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 and 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

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

Viscosity - Temperature Diagram for Shell Tellus S2 VX

