

# Shell Tellus Oils

## High performance hydraulic oil



Shell Tellus Oils are premium quality, solvent refined, high viscosity index mineral oil based fluids generally acknowledged to be the 'standard-setter' in the field of industrial hydraulic and fluid power lubrication.

### Applications

- Industrial hydraulic systems
- Mobile hydraulic fluid power transmission systems
- Marine hydraulic systems

### Performance Features and Benefits

- **Thermal stability**  
Thermally stable in modern hydraulic systems working in extreme conditions of load and temperature. Tellus Oils are highly resistant to degradation and sludge formation therefore improving system reliability and cleanliness.
- **Oxidation resistant**  
Resist oxidation in the presence of air, water and copper. Turbine Oil Stability Test (TOST) results show outstanding performance for Tellus Oils; low acidity, low sludge formation, low copper loss; therefore extending oil drain interval life and minimising maintenance costs.
- **Hydrolytic stability**  
Tellus Oils have good chemical stability in the presence of moisture, which ensures long oil life and reduces the risk of corrosion and rusting.
- **Outstanding anti-wear performance**  
Proven anti-wear additives are incorporated to be effective throughout the range of operating conditions, including low and severe duty high load conditions. Outstanding performance in a range of piston and vane pump tests; including the tough Denison T6C (dry and wet versions) and the demanding Vickers 35VQ25. Tellus Oils help system components last longer.
- **Superior filterability**  
Tellus Oils are suitable for ultra-fine filtration, an essential requirement in today's hydraulic systems. Unaffected by the usual products of contamination, such as water and calcium, which are known to cause blockage of fine filters. Customers can use finer filters, therefore achieving all the benefits of having in use cleaner

fluids.

- **Low friction**  
Tellus Oils possess high lubrication properties and excellent low friction characteristics in hydraulic systems operating at low or high speed. Prevents stick-slip problems in critical applications enabling very fine control of machinery.
- **Excellent air release and anti-foam properties**  
Careful use of additives to ensure quick air release without excessive foaming. Quick air release helps minimise cavitation and slow oxidation, maintaining system and fluid performance.
- **Good water separation**  
Good water separation properties (demulsibility). Resists the formation of water-in-oil emulsions and prevents consequent hydraulic system and pump damage.
- **All round versatility**  
Tellus Oils are suitable for a wide range of other industrial applications.

### Specifications and Approvals

Tellus Oils have the following approvals:

CINCINNATI P-68 (ISO 32)  
CINCINNATI P-70 (ISO 46)  
CINCINNATI P-69 (ISO 68)  
DENISON HF-0  
DENISON HF-1  
DENISON HF-2  
Eaton (Vickers) M-2950 S  
Eaton (Vickers) I-286 S

Tellus Oils meet the requirements of:

DIN 51524 PART 2  
ISO 11158  
GM LS/2  
AFNOR NF-E 48-603  
Mannesman Rexroth RE 90 220-1  
Swedish Standard SS 15 54 34 AM

### Compatibility

Tellus Oils are compatible with most pumps. However, please consult your Shell Representative before using in pumps containing silver plated components

### Seal & Paint Compatibility

Tellus Oils are compatible with all seal materials and paints normally specified for use with mineral oils.

### Health & Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet which can be obtained from your Shell representative.



### Protect the environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

## Typical Physical Characteristics

Shell Tellus Oil	22	32	37	46	68	100
ISO Oil Type	HM	HM	HM	HM	HM	HM
<b>Kinematic Viscosity</b> @ 0°C cSt 40°C cSt 100°C cSt (IP 71)	180 22 4.3	338 32 5.4	440 37 5.9	580 46 6.7	1040 68 8.6	1790 100 11.1
<b>Viscosity Index</b> (IP 226)	100	99	99	98	97	96
<b>Density @ 15°C</b> kg/l (IP 365)	0.866	0.875	0.875	0.879	0.886	0.891
<b>Flash Point</b> °C (Pensky-Martens Closed Cup) (IP 34)	204	209	212	218	223	234
<b>Pour Point</b> °C (IP 15)	-30	-30	-30	-30	-24	-24

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

# Viscosity - Temperature - Diagram

