

Shell TELLUS® Oils

High performance hydraulic oil

Shell TELLUS® Oils are premium quality, solvent refined, high viscosity index mineral oils that deliver superb performance in the majority of hydraulic applications.

Performance Features and Benefits

- **Thermal stability**
Thermally stable in modern hydraulic systems working in extreme conditions of load and temperature. Shell TELLUS® Oils are highly resistant to degradation and sludge formation therefore helping to improve system reliability and cleanliness.
- **Oxidation resistant**
Resists oxidation in the presence of air, water and copper. Turbine Oil Stability Test (TOST) results show outstanding performance for Shell TELLUS® Oils; low acidity, low sludge formation, low copper loss; therefore helping to extend oil drain intervals life and minimize maintenance costs.
- **Hydrolytic stability**
Shell TELLUS® Oils have good chemical stability in the presence of moisture, which helps to ensure long oil life and reduce 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. Shell TELLUS® Oils help system components last longer.
- **Superior filterability**
Shell TELLUS® Oils are suitable for ultra-fine filtration, an essential requirement in today's hydraulic systems. They are typically unaffected by the usual products of contamination, such as water and calcium, which are known to cause blockage of fine filters.
- **Low friction**
Shell TELLUS® Oils possess high lubrication properties and excellent low friction characteristics in hydraulic systems operating at low or high speed. They help prevent 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 minimize 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**
Shell TELLUS® Oils are suitable for a wide range of other industrial applications.

Main Applications

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

Advice on applications not covered in this handbook may be obtained from your Shell representative.

Specifications, Approvals, and Recommendations

Shell 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

Shell TELLUS® Oils meet the requirements of:

ISO 11158
AFNOR NFE 48-603
Mannesman Rexroth RE 90 220-1
Swedish Standard SS 15 54 34 AM

Compatibility and Miscibility

Compatibility

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

Seal and Paint Compatibility

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

Handling and Safety Information

For information on the safe handling, storage, or use of this product, refer to its Material Safety Data Sheet at <http://www.epc.shell.com/>. If you are a Shell Distributor, please call 1+800-332-6457 for all of your service needs. All other customers please call 1+800-237-8645 for all of your service needs.

Protect the Environment

Do not discharge into drains, soil, or water.

Typical Physical Characteristics

Shell TELLUS® Oil	22	32	46	68	100	150
ISO Oil Type	HM	HM	HM	HM	HM	HM
Kinematic Viscosity						
@ 40°C cSt	22	32	46	68	100	150
@ 100°C cSt	4.3	5.4	6.7	8.6	11.1	14.5
Viscosity Index	100	99	98	97	96	95
Density @ 15°C kg/L	0.866	0.875	0.879	0.886	0.891	0.886
Flash Point (PMCC)	°F 399	408	424	433	453	450
Pour Point	°F -22	-22	-22	-11	-11	10

These characteristics are typical of current production. While future production will conform to Shell specifications, variation in these characteristics may occur.