

Shell TELLUS® Oils Premium

Excellent quality hydraulic oils

Shell TELLUS® Oils Premium are excellent quality hydraulic oils blended with a Shell proprietary additive technology and high quality severely hydrotreated base oils to meet the requirements of the most demanding hydraulic systems. Shell TELLUS® Oils Premium have been specifically developed to help reduce maintenance costs and increase productivity.

Performance Features and Benefits

- **Thermal stability**
The use of a Shell proprietary additive technology in selected Group II base oils allow to achieve outstanding thermal stability even in those modern hydraulic systems working in extreme conditions of load and temperature.
- **Oxidation resistant**
Together with thermal stability this is the area in which Shell TELLUS® Oils Premium exceed mostly industry standard, as defined by the TOST test, thus making them particularly suitable for system working at high temperature and workload.
- **Hydrolytic stability**
Shell TELLUS® Oils Premium 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.
- **Superior filterability**
Shell TELLUS® Oils Premium are suitable for ultra-fine filtration, an essential requirement in today's hydraulic systems. They stay 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 Premium 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 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 Premium are suitable for a wide range of other industrial applications.

Main Applications

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

The outstanding thermal stability and oxidation resistance make the products particularly indicated for all those application with very high working temperature.

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

Specifications, Approvals, and Recommendations

Shell TELLUS® Oils Premium 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 Premium meet the requirements of:

ISO 11158

AFNOR NFE 48-603

Mannesman Rexroth RE 90 220-1

Swedish Standard SS 15 54 34 AM

Compatibility

Shell TELLUS® Oils Premium 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 Premium 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® Oils Premium	22	32	46	68	100
ISO Oil Type	HM	HM	HM	HM	HM
Kinematic Viscosity					
@ 40°C cSt	22	32	46	68	100
@ 100°C cSt	4.4	5.4	6.8	8.7	11.0
(ASTM D445)					
Viscosity Index	109	102	102	99	94
(ASTM D 2270)					
Density @ 15°C kg/L (lb/gal)	0.864 (7.21)	0.868 (7.24)	0.871 (7.27)	0.873 (7.29)	0.875(7.30)
(ASTM D1298)					
Flash Point °C (°F)	195 (383)	200 (392)	210 (410)	225 (437)	230 (446)
(Cleveland Open Cup)					
(ASTM D 0092)					
Pour Point °C (°F)	-30 (-22)	-30 (-22)	-30 (-22)	-30 (-22)	-20 (-4)
(ASTM D 97)					

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