

Shell TELLUS® Fluids EE

Energy Efficient Hydraulic Fluids

Shell TELLUS® Fluids EE are high quality hydraulic fluids specifically designed to help customers reduce their energy costs while operating hydraulic systems especially for those working in stationary conditions. They maintain or even further improve all the other properties of Shell TELLUS® Oils.

Performance Features and Benefits

- **Energy efficiency**
The formulation adopted allows to achieve energy savings, in average up to 5% as demonstrated in field trials, thanks to the following three elements: the fluid density, the friction properties and high viscosity index. The first two are the drivers for system operating in stationary condition while the third one play a key role in case of variable conditions.
- **Help the environment**
Achieving energy efficiency means reducing CO2 emissions thus contributing to reducing environmental impact.
- **Reduce maintenance costs**
Shell TELLUS® Fluids EE helps minimize problems such as: Sludge build up, Valve sticking, Increased wear, Filter blocking, Corrosion and Contamination.
By using Shell TELLUS® Fluids EE you can therefore: guard against equipment damage (pump, filter, seals, valve, hose) avoiding premature failure and replacement thus increasing productivity while reducing maintenance costs.
- **Longer oil drain intervals**
The usage of synthetic base fluids in the formulation increases the oil drain interval achievable provided that excellent maintenance and design practices are in place to prevent fluid contamination.

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® Fluids EE meet the requirements of:
CINCINNATI P-68 (ISO 32)
CINCINNATI P-70 (ISO 46)
CINCINNATI P-69 (ISO 68)
Eaton (Vickers)
ISO 11158 HM
ASTM D6158 HM
Swedish Standard SS 15 54 34 AM
AFNOR NF-E 48-603

Compatibility

Shell TELLUS® Fluids EE are compatible with most pumps and with mineral hydraulic oils despite this would cause a reduction in the energy savings achieved. However, please consult your Shell Representative before using in pumps containing silver plated components.

Seal and Paint Compatibility

Shell TELLUS® Fluids EE 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® Fluids EE		32	46	
ISO Oil Type		HM	HM	
Kinematic viscosity (ASTM D445)	@ 0°C	cSt	260	450
	@ 40°C	cSt	32	46
	@ 100°C	cSt	6.0	7.7
Viscosity Index ISO 2909		135	135	
Density (ASTM D1298)	@ 15°C kg/L	0.825	0.832	
Flash Point (ASTM D92)	°C (COC)	230	250	
Pour Point (ASTM D97)	°C	-54	-51	

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