

Shell Tellus TD 46



Heavy duty detergent hydraulic oil for wide temperature range

Shell Tellus TD 46 is a blend of top quality mineral base oils and a multi-functional additive package to provide superior performance in hydraulic and other industrial systems working in a wide range of temperatures and operating conditions.

Applications

- **Earth moving equipment and similar units subjected to the most severe outdoor operating conditions.**
- **All hydraulic systems for which an HLPD oil is specified.**
- **Certain industrial gearboxes.**
- **Hydraulic systems which specify the use of engine oils meeting SAE 10W, 20W-20 or 30 viscosity classifications**

Performance Features and Benefits

- **Very high viscosity index**
Little change of viscosity as temperatures rise or fall.
- **Powerful cleaning properties**
Prevents the breakdown of hydraulic systems caused by sticky residues and deposits. The dirt is very finely dispersed and kept in suspension, even when the oil is contaminated with synthetic metal-working fluids.
- **Effective anti-corrosion performance**
An active anti-corrosion additive effectively protects hydraulic systems from corrosion.
- **Emulsification properties**
Water collected in the lubrication system, due to condensation or contamination with soluble cutting fluid, is emulsified to provide further protection.

- **Enhanced friction properties**
Polar additives improve the friction properties and prevent stick-slip, which may occur with the use of modern sealing materials in hydraulic systems.
- **Anti-wear**
Anti-wear properties and load carrying capacity in hydraulic systems exceed the requirements for HLP oils laid down in DIN 51524.
- **Excellent mechanical and oxidation stability**
A natural resistance to ageing in systems operating under severe thermal stress is enhanced by specially selected additives.
- **Very good filterability**
An essential quality in modern hydraulic systems where the use of very fine filters has become standard practice.

Specification and Approvals

HVLPD according to DIN 51502
ISO class L-HV according to ISO 6743/4

Advice

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

Health and 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

Tellus TD		46
ISO Viscosity grade		46
Kinematic Viscosity	ASTM D 445	
at 40°C	mm ² /s	47
at 100°C	mm ² /s	9,3
Viscosity Index	ISO 2909	185
Density at 15°C	kg/l	ISO 12185
		874
Flash Point COC	°C	ISO 2592
		190
Pour Point	°C	ISO 3016
		-54

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

