



# Shell Tellus T

## *Premium hydraulic oil for wide temperature ranges*

Premium performance, anti-wear hydraulic oils which incorporate a special viscosity index improver additive to enhance their viscosity/temperature characteristics.

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### **Main Applications**

Hydraulic and fluid power transmission systems subjected to wide variations in temperature or where low viscosity change with fluctuating temperature is required.

Certain critical hydraulic systems can only tolerate small variations in viscosity with fluctuating temperature if efficiency and responsiveness are to be maintained. Hydraulic oils, such as Shell Tellus Oil T, which exhibit multigrade viscosity characteristics may be used to particular advantage in these circumstances.

### **Performance Features**

#### ***Very low viscosity variation with temperature***

Special viscosity index technology minimises the oil's variation in viscosity with changes in temperature and provides good pumpability at low temperatures. These features are particularly beneficial in hydraulic applications subjected to extremes of temperature.

#### ***High shear stability***

The 'VI' improver type is highly resistant to mechanical stress.

#### ***Outstanding anti-wear performance***

Proven anti-wear additives are effective in all operating conditions, including low and severe duty, high load situations.

#### ***Excellent filterability***

Minimal tendency to cause filter blockage in the presence of contaminants such as water and calcium

#### ***Oxidation resistant***

Resist the formation of acidic products and sludge, even at high working temperatures.

#### ***Corrosion protection***

Provides long term protection against corrosion of both ferrous and non-ferrous metals.

#### ***Rapid air release and anti-foam properties***

Provide air release without excessive foaming.

### **Performance Specifications**

- ISO Type HVLP & HV
- DIN 51524-3

### **Performance Benefits**

- Excellent anti-wear properties which protect hydraulic pumps and motors
- Excellent filterability
- Good air release and low foaming properties which minimise oil loss
- Good water separation properties
- High viscosity index permits operation of equipment over a wide range of temperature and helps to control peak system pressures on start up
- Excellent oxidation stability results in long oil service life
- Rust inhibitors protect equipment and pipework
- Excellent anti wear properties result in low wear rates of pumps and motors
- Approved by manufacturers of all major hydraulic pumps, motors and valves

## Advice

### Compatibility

The anti-wear additive technology used in Shell Tellus Oils T is based upon zinc which, although ideal for most hydraulic pumps, should not be used in those of older design containing silver-plated components. Shell Tellus Oils S should be used for these applications.

### Seal & Paint Compatibility:

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

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

## Health & Safety

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

## Typical Physical Characteristics

Shell Tellus Oil	T15	T22	T32	T46	T68	T100
<b>ISO Oil Type</b>	HV	HV	HV	HV	HV	HV
<b>Kinematic Viscosity</b>						
0°C cSt	75	-		310	-	960
20°C cSt	30	-	71	105	-	268
40°C cSt	15	22	32	46	68	100
100°C cSt	3.8	4.9	6.4	8.2	10.9	14.7
(IP 71)						
<b>Viscosity Index</b>	150	150	150	150	150	150
(IP 226)						
<b>Density @ 15°C kg/l</b>	0.871	0.872	0.872	0.872	0.877	0.889
(IP 365)						
<b>Flash Point °C</b>	160	176	170	210	230	176
(Pensky-Martens Closed Cup)						
(IP 34)						
<b>Pour Point °C</b>	-42	-42	-42	-39	-36	-30
(IP 15)						

These characteristics are typical of current production.

Whilst future production will conform to Shell's specification variations in these characteristics may occur.