



## Lubricants – Hydraulic oils

Version: 411/02b

## Valvoline™ HVLP 46

*Hydraulic oil formulated for industrial and earth moving equipment.*

Valvoline HVLP 46 is a conventional hydraulic oil, formulated with high quality mineral base oils and anti-wear additives to offer solid hydraulic performance in a wide range of applications. Valvoline anti wear hydraulic oils, meeting the DIN 51524 part 3 standard, are available in three ISO viscosity grades (ISO 32, 46, 68).

This range of high viscosity index (VI) hydraulic oils offers superior anti-wear protection and heavy-duty service performance even in extreme climatic conditions.

### Performance levels

DIN 51524 (part 3)

### Applications

Applications include off-highway equipment subjected to high and low temperatures like hydraulic systems of industrial and earth moving equipment.

Hydraulic cranes and lifts, loaders, reach trucks, forklifts, excavators, dumpers, loading ramps, and tailboards.

Hydraulic systems working in very cold or very warm circumstances:

- Forklifts in freezing warehouses
- Lifts in high buildings
- Hydraulic steering cabin of a ship

### Features & Benefits

#### Solid performance

Formulated with high quality mineral base oils and specific additives to protect against corrosion, foaming and sludge forming.

The product can handle small quantities of penetrating dust and resists foaming, caused by access of air via leaking seals.

The product also protects the hydraulic system against rust and corrosion when working in a moist environment.

#### Consistent viscosity

The product stays in grade during use and shows good viscosity-temperature behavior. Available in three ISO viscosity grades.

#### Severe working conditions

Valvoline hydraulic oils can even be used in unfavorable working conditions, like damp or dusty environment or elevated temperatures.

# PRODUCT INFORMATION



## Keeping the world moving since 1866™

Serving more than 100 countries around the globe, Valvoline is a leading marketer, distributor and producer of quality branded automotive and industrial products and services. Products include automotive lubricants; transmission fluids; gear oils; hydraulic lubricants; automotive chemicals; specialty products; greases, and cooling system products.

For more information on Valvoline products, programs and services please visit [www.valvolineeurope.com](http://www.valvolineeurope.com)

## Typical properties

Typical property characteristics are based on current production. Whilst future production will conform to Valvoline specifications, variations in these characteristics may occur.

<b>Valvoline HVLP 46</b>	
<b>Colour, ASTM D-1500</b>	1,0
<b>Viscosity, mm<sup>2</sup>/s @ 100 °C.</b> ASTM D-445	7,9
<b>Viscosity, mm<sup>2</sup>/s @ 40 °C.</b> ASTM D-445	45,2
<b>Viscosity Index</b> ASTM D-2270	146
<b>TAN; mg KOH/g</b> ASTM D-664	0,4
<b>Pour Point, °C</b> ASTM D-5949	-42
<b>Specific Gravity @ 15.6°C.</b> ASTM D-4052	0,876
<b>Flash Point, COC, °C.</b> ASTM D-92	218

**This information only applies to products manufactured in the following location(s):  
Europe**

## Health & Safety

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Safety Data Sheet (SDS) which is available on request via your local sales office or via the internet <http://msds.valvoline.com>

## Protect the environment

Take used oil to an authorized collection point. Comply with local regulations. Do not discharge into drains, soil or water.

## Storage

We recommend to store all packages under cover. In case outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should never be stored above 60°C, exposed to hot sun or freezing conditions.

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