



IPT International Petroleum Trading LTD  
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25335 Elmshorn  
Company registration number: HRB 13315 PI  
Sales tax identification number: DE313987910  
**E-mailaddress:** [contact@tippoil.com](mailto:contact@tippoil.com)  
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product certificate TIPP-OIL Mineral Hydraulic HLP 46

#### Description of the

TIPP-OIL Mineral Hydraulic HLP 46 is an optimally alloyed hydraulic oil. It has a high performance level and a wide application range within the entire industry. Mineral Hydraulic HLP 46 is characterized by good viscosity and temperature behaviour, high ageing resistance and reliable corrosion protection.

#### Application note:

Mineral Hydraulic HLP 46 is suitable for all hydraulic systems and can be used universally. The use of Mineral Hydraulic HLP 46 is especially recommended for use in circulation systems, for the supply of small gears, for thermally highly loaded hydraulic systems with high-pressure pumps of all designs, in sensitive control systems and for hydraulic systems in agriculture.

#### Specifications

DIN 51 524, part 2

#### Tried and tested in practice in units with filling regulations:

AFNOR NFE 48 603 HM, Cincinnati Milacron P-68, 69, 70, DENISON HF-2 and HF-0, General Motors LH-04-1, LH-06-1, LH-15-1, MIL-H 24 459, US Steel 136, 127

#### Properties:

High performance level



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Very good viscosity-temperature behaviour

High ageing resistance

Excellent wear protection

Reliable corrosion protection - Neutral towards sealing materials

Properties Data Unit Test according to

kinematic viscosity at 40°C 47,4 MM<sup>2</sup>/S DIN ISO 51562-2

Viscosity at 100°C 7.336 MM<sup>2</sup>/S DIN ISO 51562-2

Viscosity index 116 DIN ISO 2909

Colour Yellow visual

Density at 15°C 860.2 KG/M<sup>3</sup> DIN EN ISO 12185

Pourpoint -39 °C ASTM D 7346

All data given are approximate values and are subject to the usual production fluctuations.

To the best of our knowledge, all data correspond to the current state of knowledge and our development. We reserve the right to make changes. All references to DIN standards are for product description purposes only and do not constitute a guarantee. In the event of any problems, request technical advice.



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