# PRODUCT INFORMATION



## **HIGHTEC HLP-D 46 ZAF**

Detergent/dispersive, multi-purpose lubricating oil (zinc-free and ash-free) for hydraulics, industrial gears and bearings

#### Description

HIGHTEC HLP-D 46 ZAF is a hydraulic oil containing additives to prevent corrosion, wear and friction. Moreover, this oil also has detergent properties that enable dirt particles to be more readily dispersed or suspended in water than conventional HLP oils. These suspended particles should then be filtered out in the filter system. A special focus should therefore be placed on its good corrosion protection and dirt holding capacity. Furthermore, such oils tend to be more hydrolytically stable as well as zinc-free, non-alkaline and free of alkaline earth and therefore particularly low in ash. HIGHTEC HLP-D 46 ZAF is a multi-purpose lubricating oil with a high load-bearing capacity and good wetting behaviour, which helps to improve performance in mixed friction conditions.

HIGHTEC HLP-D 46 ZAF exceeds the requirements concerning hydraulic oils in compliance with

DIN 51524 Part 2 and SEB 181 222 and concerning lubricating oils in compliance with DIN 51517 Part 3 and SEB 181 226 for circulation lubrication.

### Equivalent quality in accordance with EU-law as per

- DIN 51524, p. 2
- VDMA 24318
- SEB 181-222
- AFNOR E48 603 HM

# **Advantages**

- High level of wear protection
- · Good detergent and dispersion characteristics
- Zinc-free and ash-free
- Good corrosion protection
- Thermally stable
- · Resistant to oxidation
- Good air separation ability and foaming behaviour
- Hydrolytic resistance

#### Recommendation

Machine tool oil with sensitive control hydraulics, but also for other hydraulics as well as bearings and industrial gear requirements

#### **Notes**

 We recommend our HVI hydraulic oils with first-rate VT performance for industrial gears and hydraulics that operate outdoors throughout the year.

> **ROWE MINERALÖLWERK GMBH** Langgewann 101, D-67547 Worms



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### **Typical characteristics**

Property	Method	Unit	Value
Density at 15 °C	ASTM D-7042	g/ml	0.868
Kinematic viscosity KV 100	ASTM D-7042	mm²/s	7
Kinematic viscosity KV 40	ASTM D-7042	mm²/s	46
Viscosity index	ASTM D2270	-	109
Flash point	ASTM D-92 / DIN EN ISO 2592	°C	218
Pour point	ASTM D-97 / DIN EN ISO 3016	°C	-27

These characteristics are typical for current production. The data does not constitute an assurance of properties or a guarantee of suitability for a specific application. Existing legal provisions and regulations that affect handling and usage of the products must be observed by the recipient of our products. ROWE products are continuously being developed. For this reason, ROWE retains the right to change all technical data in this product information at any time without prior announcement. Our current General Delivery and Payment Conditions apply (www.rowe-oil.com).

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