

# product data sheet

## **VARPRESS HLP-D RANGE**

### **High performance hydraulic oil**

**VARPRESS HLP-D** hydraulic fluids are based on highly refined paraffinic mineral oils and include a multipurpose additive package to provide excellent anti-wear protection and resistance to corrosion, together with good emulsifying and detergent properties.

**VARPRESS HLP-D** hydraulic oils are typically used for hydraulic systems subject to contamination, particularly ingress of water. The product offers extended service life compared to standard hydraulic oils. Its water tolerance and detergency properties make it suitable for applications where drain of water, either fresh or sea water, contamination is difficult to drain.

#### **Features and Benefits**

High quality refined mineral oil with low aromatic content

Avoids build up of sludge and varnish

Continues to work in the presence of water

Resistant to oxidation

High viscosity index

Compatible with common sealing materials

Good temperature stability

Rust and corrosion inhibited - Excellent anti-wear properties

#### **Specifications**

DIN 51524-Part 2

FZG-Test A 8,3/90 11

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Typical Data					
ISO Grade			32	46	68
Parameter	Unit	Method			
<b>Kinematic Viscosity</b>					
<b>KV40</b>	mm <sup>2</sup> /Sec	ASTM-D445	32.00	46.00	68.00
<b>KV100</b>	mm <sup>2</sup> /Sec	ASTM-D445	5.37	6.77	8.70
<b>Viscosity index</b>	-	ASTM-D2270	99	99	99
<b>Density @ 15.5°C</b>	g/cm <sup>3</sup>	ASTM-D4052	0.848	0.850	0.882
<b>Flashpoint</b>	°C	ASTM-D92	204	206	208
<b>Pour point</b>	°C	ASTM-D97	-27	-24	-24
<b>Copper Corrosion</b>	-	ASTM-D130	1a	1a	1a
<b>FZG failure load stage</b>		DIN 51354-2	12	12	12

Varol Metalworking		Varol Machine Lubricants	
<b>Varcut</b>	Neat cutting oils, high performance, extensive range of viscosities	<b>Varlube S</b> Viscosity 32 - 320	Slideway
<b>Varform</b>	Comprehensive range of neat forming oils, including water extendable versions and vanishing oils	<b>Varmulti</b> Viscosity 32 - 680	Multilube - Slideway, Gear, Hydraulic
<b>Varclean</b>	Aqueous based wash fluids, surface cleaners and solvent degreasers	<b>Vargear</b> Viscosity 68 - 460	Industrial Gear
<b>Varcool &amp; Vargrind</b>	Comprehensive range of high performance water soluble fluids. Low, medium, high oil content and synthetics	<b>Varpress</b> Viscosity 5 - 150	Hydraulic oil range covering zinc containing, zinc free and high VI