



## Product Data

### VARIO HDX

#### Detergent Hydraulic Oil

#### DESCRIPTION

Castrol Vario HDX is a high performance machine tool lubricant, developed to conform to the HLP-D (detergent) classification for hydraulic fluids.

#### APPLICATION

Castrol Vario HDX also incorporates lubricity additives to give smooth slideway motion on the combined hydraulic and slideway lubrication systems of some grinding and gear cutting machine tools. Castrol HLP-D fluids contain detergency additives which maintain dirt and oil oxidation products in suspension, preventing them from settling out and forming deposits which could impair the free operation of valves, leading to erratic system operation. Machine tool manufacturer's are increasingly specifying HLP-D fluids such as Vario HDX, having recognised their advantages in increased system reliability.

#### FEATURES

- ◆ HLP-D fluid containing detergency additives
- ◆ Very high viscosity index
  
- ◆ Contains lubricity additives

#### BENEFITS

- ◆ Maintains cleanliness and give reliable hydraulic action in fine tolerance systems
- ◆ Suitable for a wide range of hydraulic applications and giving consistent operation over wide temperature ranges
- ◆ Overcomes stick/slip, giving judder-free operation of machine tool slideways

#### TYPICAL PHYSICAL CHARACTERISTICS

ISO Classification	HLP-D 46
Kinematic Viscosity	
@ 40°C, cSt	46
@ 100°C, cSt	7.8
Viscosity Index	150
Relative Density @ 20°C	0.875
Pour Point, °C	-33
Closed Flash Point, °C	230

Vario HDX  
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All reasonable care has been taken to ensure that the information contained in this publication is accurate at the date of printing. It should be noted however that the information may be effected by changes subsequent to the date of printing in the blend formulation or methods of application of any of the products referred to or in the requirements of any specification approval relating to any such Products

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