



# Aral Vitam MW 46

zinc free HLP hydraulic oil

## Description

Aral Vitam MW 46 is a high-performance zinc free hydraulic oil corresponding to the "type HLP". Due to the properties of this hydraulic oil, it has excellent anti-wear protection over a broad load range, very good air and water separation, minimal foaming tendency, optimal corrosion prevention, good sealing compability and a high ageing stability. Aral Vitam MW 46 can be used where special thermal or mechanical loads require high-performance hydraulic oils.

## Advantages

- meeting the performance requirements of DIN 51 524 Part 2 'Hydraulic Oils Type HLP' and of ISO 6743/4 'Hydraulic Oils Type HM'.
- zinc-free additives to minimise machinery wear, corrosion, oxidation and foaming.
- superior anti-wear performance due to a Brugger value higher than 30 N/mm<sup>2</sup>.
- non-detergent type hydraulic fluid providing good water separation and corrosion protection characteristics.
- suitable for hydraulic systems of high performance machine tools.
- reliable, trouble-free operation in hydraulic systems, such as those used on modern machine tools.
- suitable for use in Schuler Mueller-Weingarten hydraulic presses.

## Typical Characteristics

Name	Method	Units	Aral Vitam MW 46
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	876
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	46
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	6.8
Viscosity Index	ISO 2909 / ASTM D2270	-	100
Pour Point	ISO 3016 / ASTM D97	°C/°F	-24/ -11
Acid Number	ISO 6619 / ASTM D664	mgKOH/g	0.27
Air Release @ 50°C / 122°F	ISO 9120 / ASTM D3427	min	4
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	230/446
Oxide Ash content	ISO 6244 / ASTM D482	%wt	<0.03
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	12
Brugger test	DIN 51347	N/mm <sup>2</sup>	>40

Subject to usual manufacturing tolerances.

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