

STRUB Vulcolube HLP-D ZF

Zinc-free multipurpose / industrial and hydraulic oil



Description

STRUB Vulcolube HLP-D ZF are newly formulated hydraulic oils based on solvent-refined base oils. They are free of zinc and offer additional application advantages.

Application

For machine tools and hydraulic systems in case of possible water ingress. Hydraulic systems in industry, construction, transport and agriculture.

The zinc-free products were developed for hydrostatic, oil-hydraulic systems in mobile and stationary use. HLP-D-ZF is particularly suitable for modern hydraulic systems in industry where the use of hydraulic oils according to DIN 51524 T.2 is prescribed. HLP D-ZF can also be used for the lubrication of smaller industrial gearboxes where a CLP fluid is required.

Features and advantages

- detergent properties, water is bound without noticeable loss of quality
- very good wear protection (FZG standard test A8, 3/90°C) > 12
- excellent EP effect (pressure absorption and lubricating effect)
- free of zinc, waste water contamination is reduced
- very good oxidation protection, therefore long service life of the fillings
- excellent demulsibility
- good corrosion protection
- compatible with commercially available seals
- good foaming behavior

Specifications

DIN 51524 Part 2 + DIN 51517 Part 3 (and is referred to as HLPD according to DIN 51502) / SEB 181.222

The information in this technical data sheet is based on general knowledge and application possibilities. STRUB + Co. AG is not liable for damage resulting from improper use of the products. The industry-standard measurement and production tolerances apply to the specified characteristic. Generally, no legal binding can be derived from these data. Our products are subject to continuous further development. Therefore, STRUB + Co. AG reserves the right to change all technical data in this data sheet at any time and without prior notice.

Technical data

ISO	Density at 20°C	Viscosity at:						Visc. Index	Flash- punkt °C	Pour- point °C	Art. No.
		40°C	50°C	50°C	100°C	0°C	20°C				
		mm ² /s	mm ² /s	°E	mm ² /s	mm ² /s	mm ² /s				
2	0,805	2.2	1.8	1.10	-	6	3.2	-	100	- 50	
3	0,810	3.2	2.6	1.17	-	9	4.8	-	100	- 45	
5	0,840	5	4.0	1.30	1.74	17	8.4	120	120	- 39	
7	0,850	7	5.4	1.43	2.15	29	12.7	115	140	- 36	
10	0,853	10	7.5	1.6	2.7	49	19	110	160	- 36	
15	0,855	15	10.8	1.9	3.5	93	33	110	170	- 33	
22	0,863	22	15	2.3	4.3	170	52	105	185	- 33	
32	0,870	32	21	3.0	5.3	310	83	105	205	- 33	32975
46	0,874	46	30	4.1	6.7	510	126	105	230	- 33	31443
68	0,880	68	43	5.7	8.8	950	205	105	240	- 30	31623
100	0,885	100	60	7.9	11.0	1700	320	100	250	- 27	
150	0,894	150	87	11.4	14.5	2900	500	100	260	- 24	33349
220	0,895	220	125	16.4	19	5000	780	100	270	- 21	
320	0,899	320	180	23.7	24	8500	1250	100	280	- 18	
460	0,903	460	240	31.6	30	15000	1950	95	290	- 15	

Transport

ADR/SDR

No dangerous goods

Disposal

LVA VeVA / EAK:

13 01 10

Hinweis

We also manufacture the following hydraulic oils:

STRUB Vulcolube HLP	Multipurpose/industrial and hydraulic oil
STRUB Vulcolube HLP-D	with dispersing properties
STRUB Vulcolube EP VI	HLP with high viscosity index of over 150
STRUB Vulcolube EP VI 300	HLP with extremely high viscosity index of 300
STRUB Vulcolube HLP-D VI	HLP-D with very high viscosity index of 200
STRUB Hydrosynt HEES	ester-based, biodegradable
STRUB Hydrosynt HFD-U	biodegradable
STRUB Vulcosafe HL	flame retardant, biodegradable
STRUB Oil System Cleaner 1200	System cleaner for all mineral oil-based systems. Significantly extends the hydraulic service life.

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