Hydraunycoil FH 14

ANTI-CORROSION & ANTI-WEAR PETROLEUM HYDRAULIC FLUID

TL 9150-0035 Iss. 5 – H-540

Description

Hydraunycoil FH 14 is a petroleum-based hydraulic fluid with a viscosity of 38 cSt at 40°C and a viscosity index exceeding 280. It exhibits good anti-rust as well as anti-wear properties.

Hydraunycoil FH 14 is microfiltered and is supplied with a controlled particulate contamination. It can be used over an extremely wide temperature range, from - 40°C to + 135°C in air-tight circuits.

Application

Hydraunycoil FH 14 is intended primarily for use as an operational preservative fluid for ordnance equipment such as recoil systems and hydraulic systems for rotating weapon or aiming devices.

It has been particularly designed for the Krauss-Maffei Leopard tank and as hydraulic fluid for bridge ledger where it offers the right balance of viscosity, low temperature viscosity, anti-wear and corrosion protection.

Characteristic		Unit	Result	Limit*	Test method
- Appearance		-	conform	clear limpid	visual examination
- Color		-	1.0	Max. 5.0	ASTM D 1500
- Specific gravity at 15°C		-	0.892	report	ASTM D 4052
- Kinematic viscosity at	100°C 40°C - 40°C - 40°C after 1 hour	mm²/s	10.6 38.1 7040 7010	min. 9.8 min. 36.0 max. 8000 report	ASTM D 445
- Viscosity Index		-	284	min. 250	ASTM D 2270
- Flash point, COC		°C	136	min. 121	ASTM D 92
- Pour point		°C	- 57	max. - 45	ASTM D 97
- Acid number (pH = 11)		mg KOH/g	2.40	max. 3.0	ASTM D 974
- Copper corrosion	3 h at 100°C	-	1a	max. 1b	ASTM D 130
- Element content	zinc calcium barium chlorine sulphur	mg/kg %m	1420 500 8 3 0.32	report report report max. 100 report	ICP UOP 779/92 NFM 07-052
- Water content		mg/dm^3	220	max. 1000	MO-10-001
- Solid particles contamination		-	pass	NAS Class 9	HIAC
- FZG test – Damage level		stage	10	10 min.	DIN 51354 T
- Wear test – wear scar 1 h, 40 daN, 75°C		mm	0.52	max. 0.60	ASTM D 4172
- Desaeration at +50°C		min	5	max. 8	DIN 51381
- Stability 72 h at -40°C		-	pass	TL 9150-0035	FTMS-S-791-3459
- Foaming characteristics – Foam volume (after)		cm^3			ASTM D 892
at 24°C	5 minutes aeration		10	max. 150	
	10 minutes settling		0	0	
at 94°C	5 minutes aeration		60	max. 150	
	10 minutes settling		0	0	
at 24°C after 94°C	5 minutes aeration		20	max. 150	
	10 minutes settling		0	0	
- Humidity Cabinet – 200 h on steel QQ-S-698		-	pass	grade 1	DIN 51359
- Rubber compatibility – SRE-NBR1 – 168 h at 100°C					
	- Swelling	%vol	+16	+9 to +21	DIN 53521
	- Hardness change	Shore A	-5	max. - 7	DIN 53505
	- Elongation change	%	-9	max. - 35	DIN 53504
	- Tensile strength change	%	-15	max. -20	
- Homogeneity test		-	pass	TL 9150-0035	TL 9150-0035
- Shear stability - 250 cycles viscosity change at 40°C		%	-0.5	max. - 3.0	DIN 51382

* Specification TL 9150-0035 Iss.5

The values above are typical values. They do not constitute any contractual commitment.
Sales specifications are available on request. The present technical data sheet replaces all the previous editions.

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