NYCO DEFENCE

TECHNICAL DATA SHEET

HYDRAUNYCOIL FH 14

ANTI-CORROSION & ANTI-WEAR PETROLEUM HYDRAULIC FLUID

NATO CODE H-540 – TL 9150-0035 Issue 7

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 micro-filtered 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.

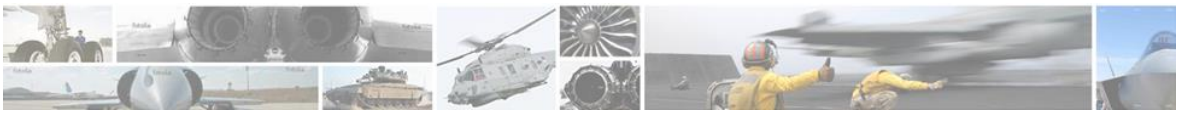
APPLICATION

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	Typical Result	TL 9150-0035 Iss.7 Limit	Test method
- Appearance	-	conform	clear limpid	visual examination
- Color	-	0.8	max. 5.0	ASTM D 1500
- Density at 15°C	-	0.86	report	ASTM D 4052
- Kinematic viscosity at 100°C 40°C - 40°C	mm²/s	11.6 40.7 4420	min. 9.8 36 - 45 report	ASTM D 445
- Viscosity Index	-	294	min. 250	ASTM D 2270
- Stability 72 h at -40°C	-	pass	TL 9150-0035	FTMS-S-791-3459
- Flash point, COC	°C	162	min. 130	ASTM D 92
- Pour point	°C	- 46	max. - 45	ASTM D 97
- Total acid number	mg KOH/g	2.95	2.5 - 3.5	ASTM D 974
- Copper corrosion, 3 h at 100°C	rating	1a	max. 1	ASTM D 130
- Element content zinc calcium phosphorus sulphur	mg/kg	1340 475 1500 3540	report report report report	Induction Coupled Plasma Spectroscopy
- Water content	mg/kg	300	max. 500	ASTM D 1533
- Solid particles contamination	-	pass	NAS Class 9	HIAC counter
- FZG test – Failure Load Stage	stage	10	min. 10	DIN ISO 14635-1
- Steel on steel wear scar, 4-ball machine, after 1h at 40 daN, 75°C	mm	0.50	max. 0.60	ASTM D 4172
- Air release at +50°C	min	5	max. 8	DIN 51381
- Foaming test (tendency 5min aeration / stability 1 min settling) at 24°C at 94°C at 24°C after 94°C	ml/ml	 10/0 45/0 10/0	 max. 150 / 0 max. 150 / 0 max. 150 / 0	ASTM D 892
- Rubber compatibility – SRE-NBR1 – 168 h at 100°C				
- Swelling	%vol	+10	+7 to +19	DIN 53521
- Hardness change	Shore A	-1	max. - 7	DIN 53505
- Elongation change	%	-29	max. - 35	DIN 53504
- Tensile strength change	%	+8	max. -20	DIN 53504
- Shear stability - 250 cycles viscosity change at 40°C	%	-1.7	max. 3.0	DIN 51382

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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