



PETROLEUM HYDRAULIC FLUID

NATO CODE H-515

DESCRIPTION

Hydraunycoil FH 51 is a petroleum-based hydraulic fluid with a viscosity of 14 cSt at 40°C. It contains antioxidant, anti-corrosion and anti-wear additives. Hydraunycoil FH 51 has an extremely wide operating temperature range (from -54°C to +135°C in air-tight circuits and -54°C to 90°C in open circuits) with a viscosity index exceeding 300. It is micro-filtered and is supplied with a controlled level of contaminant.

APPLICATIONS

- Landing gear shock struts of military and commercial aircrafts
- Flight control systems of military aircrafts and missiles
- Hydraulic systems of ground equipment (tanks, armored vehicles, etc.)

SPECIFICATION * / OEM'S & AIRFRAMERS REFERENCE

- Approved Airbus CML 02BBB9
- Approved ATR CML 02-001
- Listed in Boeing CML D00070
- Listed in Airbus Helicopters CM110
- Approved DCSEA 415/A
- Approved DEF STAN 91-48 Iss. 2 / OM-15
- Approved MIL-PRF-5606 J

* **Approved:** The product has been approved by the relevant authority. The product is referenced on the applicable qualified product list.

CHARACTERISTIC	UNIT	TYPICAL RESULT	MIL-PRF-5606 J LIMITS	TEST METHOD
Density at 20°C	-	0.870	report	ASTM D4052
Appearance	-	limpid red oil	red oil	Visual
Kinematic Viscosity At 200°C At 100°C At 40°C At - 40°C At - 54°C	mm²/s	2.1 5.39 14.12 444 2012	- min. 4.9 min. 13.2 max. 600 max. 2500	ASTM D445
Low temperature Stability, 72 h at - 54°C	-	pass	no gelling, clouding, crystallization, solidification or separation	FED-STD-791-3458
Flash Point	°C	91	min. 82	ASTM D93
Auto-Ignition Temperature	°C	245	-	ASTM E659
Pour Point	°C	- 69	max. - 60	ASTM D97
Total Acid Number	mg KOH/g	0.04	max. 0.20	ASTM D664
Evaporation Loss, 6 h at 71°C	%w	16.2	max. 20.0	ASTM D972

Foaming Test (tendency/stability)at 24°C	cm ³ /cm ³	42/0	max. 65/0	ASTM D892
Steel on steel wear, 4-ball machine, scar diameter, 1h at 392N	mm	0.88	max. 1.0	ASTM D4172
Solid Particles Content	nb/100 cm ³			
5 - 15 µm		2700	max. 8000	HIAC automatic counter FED-STD-791-3012
16 - 25 µm		150	max. 1425	
26 - 50 µm		40	max. 253	
51 - 100 µm		10	max. 45	
> 100 µm		1	max. 8	
Elastomer NBR-L Compatibility, 168h at 70°C	%v	28.5	19.0 to 30.0	FTM-S-791-3603
Copper Corrosion, 3h at 100°C	rating	2a	max. 2e	ASTM D130
Water Content	mg/kg	57	max. 100	ASTM D1533

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