



PETROLEUM HYDRAULIC FLUID

NATO CODE H-515 – DCSEA 415/A – MIL-PRF-5606 H
DEF STAN 91-48 Iss.2 – OM-15

DESCRIPTION

Hydrauncoil FH 51 is a petroleum-based hydraulic fluid with a viscosity of 14 cSt at 40°C. It contains anti-corrosion and anti-wear additives.

Hydrauncoil 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) and a viscosity index exceeding 300. It is micro-filtered and is supplied with a controlled level of contaminant.



APPLICATIONS

- Shock strut fluid for landing gear absorber
- Helicopter systems
- Hydraulic fluid
- Landing gear fluid
- Leak testing
- Hydraulic systems for military aircrafts
- General purpose hydraulic fluid for ground equipment
- Test bench
- Hydraulic actuators
- Missile hydraulic systems

Characteristic	Unit	Typical Result	MIL-PRF-5606 H Limits	Test method
- Density at 20°C	-	0.870	report	ASTM D 4052
- Appearance	-	limpid red oil	red oil	Visual
- Kinematic viscosity				
At 200°C		2.1	-	
At 100°C		5.39	min. 4.9	ASTM D 445
At 40°C	mm²/s	14.12	min. 13.2	
At - 40°C		444	max. 600	
At - 54°C		2012	max. 2500	
- 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 D 93
- Auto-ignition temperature	° C	245	-	ASTM E 659
- Pour point	°C	- 69	max. - 60	ASTM D 97
- Total acid number	mg KOH/g	0.04	max. 0.20	ASTM D 664
- Evaporation loss, 6 h at 71°C	%w	16.2	max. 20.0	ASTM D 972
- Foaming test (tendency/stability) at 24°C	cm³/cm³	42/0	max. 65/0	ASTM D 892
- Steel on steel wear, 4-ball machine, scar diameter, 1h at 392N	mm	0.88	max. 1.0	ASTM D 4172
- Solid particles content				
5 - 15 µm		2700	max. 10000	
16 - 25 µm	nb/100	150	max. 1000	HIAC automatic counter
26 - 50 µm	cm³	40	max. 150	
51 - 100 µm		10	max. 20	
> 100 µm		1	max. 5	
- 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 D 130
- Water content	mg/kg	57	max. 100	ASTM D 1533

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.

