



SYNTHETIC HYDRAULIC FLUID

NATO CODE H-537

DESCRIPTION

Hydraunycoil FH 2 is a synthetic hydraulic fluid based on a blend of poly-alpha-olefins and diesters, with a viscosity of 15 cSt at 40°C and a viscosity index of 125.

It contains anti-corrosion and anti-wear additives. Its operating temperature range is - 40°C to + 205°C without air intake. It is supplied with a controlled particulate contamination level.



FH 2 is a substitute to MIL-PRF-5606/H-515 (petroleum based oils): reducing fire hazard due to high flash point, fire point and auto-inflammation temperature, evaporation loss is highly reduced.

APPLICATIONS

- Actuators and flap-control mechanisms of military and commercial aircrafts
- Landing gear shock struts of military and commercial aircrafts
- Helicopter and military hydraulic systems
- Hydraulic servo-controlled systems of missiles

SPECIFICATIONS * / OEM's & Airframers reference

- Approved MIL-PRF-83282 D
- Approved DCSEA 437/C
- Meets OX-19
- Listed in Airbus Helicopters CM151

* **Approved:** The product has been approved by the relevant authority. The product is referenced on the applicable qualified product list.
Meets: The product complies with all the requirements of the specification and has not been formally approved or approval is in progress or the specification is obsolete.

CHARACTERISTIC	UNIT	TYPICAL RESULT	MIL-PRF-83282 D LIMITS	TEST METHOD
Density at 20°C	-	0.854	Report	ASTM D4052
Appearance	-	Limpid red oil	Red oil	Visual
Kinematic Viscosity At 205°C At 100°C At 40°C At - 40°C	mm ² /s	1.10 3.51 14.25 2078	min. 1.00 min. 3.45 min. 14.0 max. 2200	ASTM D445
Low Temperature Stability, 72 h at - 40°C	-	pass	no gelling, clouding, crystallization, solidification or separation	FED-STD-791-3458
Flash Point	°C	220	min. 205	ASTM D92
Fire Point	°C	250	min. 245	ASTM D92

Auto-Ignition Temperature	° C	380	min. 345	ASTM E659
Pour Point	°C	- 66	max. - 55	ASTM D97
Total Acid Number	mg KOH/g	0.03	max. 0.10	ASTM D664
Evaporation Loss, 6 h 30 at 205°C	%w	18.8	max. 20.0	ASTM D972
Foaming Test (tendency/stability) at 24°C	cm ³ /cm ³	7/0	max. 65/0	ASTM D892
Steel on steel wear, 4-ball machine, scar diameter after 1 h at 9.8 N after 1 h at 98 N after 1 h 392 N	mm	0.10 0.24 0.55	max. 0.21 max. 0.30 max. 0.65	ASTM D4172
Solid Particles Content 5 - 15 µm 16 - 25 µm 26 - 50 µm 51 - 100 µm > 100 µm	nb/100 cm ³	2750 150 40 10 1	max. 10000 max. 1000 max. 150 max. 20 max. 5	HIAC automatic counter
Elastomer NBR-L Compatibility, 168h at 70°C	%v	20	18.0 to 30.0	FTM-S-791-3603
Water Content	mg/kg	56	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.