NYCO
AERONAUTICS & DEFENCE

HYDRAUNYCOIL FH 2

TECHNICAL DATA SHEET

SYNTHETIC HYDRAULIC FLUID

NATO CODE H-537
DCSEA 437/B
MIL-PRF-83282D AMD.1 - OX-19

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

CHARACTERISTIC	UNIT	TYPICAL RESULT	MIL-PRF-83282 D LIMITS	TEST METHOD
Density at 20°C	-	0.854	Report	ASTM D 4052
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 D 445
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 D 92
Fire point	°C	250	min. 245	ASTM D 92
Auto-ignition temperature	° C	380	min. 345	ASTM E 659
Pour point	°C	- 66	max. - 55	ASTM D 97
Total acid number	mg KOH/g	0.03	max. 0.10	ASTM D 664
Evaporation loss, 6 h 30 at 205°C	%w	18.8	max. 20.0	ASTM D 972
Foaming test (tendency/stability) at 24°C	cm^3/cm^3	7/0	max. 65/0	ASTM D 892

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 D 4172
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 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.