

## SYNTHETIC HYDRAULIC FLUID

OX-19 – H-537 – DCSEA 437/A – MIL-PRF-83282 D amd.1

### Description

Hydrauncoil 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 + 160°C in continuous use, with possible peak operating temperature up to 210°C.

It is microfiltered and is supplied with a controlled particulate contamination level.

### Application

Hydrauncoil FH 2 is used in military aircraft and missiles hydraulic systems as a substitute to MIL-H-5606/H-515 petroleum-based oils. It enables safe handling and operation of hydraulic systems at high temperature (reduced fire hazard due to high flash point and fire point). Evaporation losses are drastically reduced as well, enabling a more stable operation of mechanical components (speed of response of hydraulic actuators for example).



Characteristic	Unit	Result	Limit*	Test method
- Specific gravity at 15.6°C	-	0.851	0.850 - 0.866	ASTM D 4052
- Color	-	conform	MIL-PRF-83382	AST D 1500
- Kinematic viscosity at 205°C 100°C 40°C - 40°C	mm <sup>2</sup> /s	1.08 3.54 14.4 2165	min. 1.00 min. 3.45 min. 14.0 max. 2200	ASTM D 445
- Low temperature stability 72 h at - 40°C	-	conform	MIL-PRF-83282	FTM-S-791-3458
- Flash point	°C	228	min. 205	ASTM D 92
- Fire point	°C	260	min. 245	ASTM D 92
- Pour point	°C	- 60	max. - 55	ASTM D 97
- Acid number	mg KOH/g	0.08	max. 0.10	ASTM D 664
- Evaporation loss 6 h 30 at 205°C Mass fraction	%	16.7	max. 20.0	ASTM D 972
- Foaming characteristics at 25°C Foam volume after 5 minutes aeration 10 minutes settling	cm <sup>3</sup>	50 0	max. 65 0	ASTM D 892
- Lubricity Scare diameter 1 h - 9.8 N 1 h - 98 N 1 h - 392 N	mm	0.10 0.25 0.57	max. 0.21 max. 0.30 max. 0.65	ASTM D 4172
- Solid particles content 5 - 15 micrometers 16 - 25 micrometers 26 - 50 micrometers 51 - 100 micrometers > 100 micrometers	nb/100 cm <sup>3</sup>	pass pass pass pass pass	max. 10000 max. 1000 max. 150 max. 20 max. 5	FTM-S-791-3009
- Water content	mg/kg	70	max. 100	MO-10-001 A
- Barium content	mg/kg	0	max. 10	I.C.P.

\* MIL-PRF-8282 D specification

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.