NYCO AERONAUTICS & DEFENCE

SUMINISTROS INDUSTRIALES AERONAUTICOS DEL CARIBE SIACM SAS.

TURBONYCOIL 640

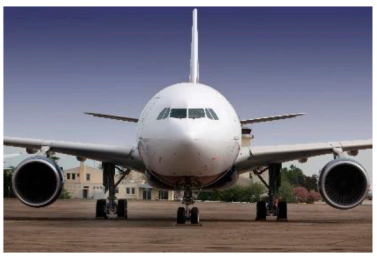
TECHNICAL DATA SHEET

SYNTHETIC AVIATION TURBINE OIL

NATO CODE O-154 - MIL-PRF-23699 G Class HTS - SAE AS5780 Class HPC

DESCRIPTION

Turbonycoil 640 is a lubricating oil with a viscosity of 5 cSt at 100°C. It is based on neopentyl polyol esters with high thermal stability, fortified with carefully selected anti-oxidant, anti-wear and anti-corrosion additives.



APPLICATIONS

TURBONYCOIL 640 has been designed for use in gas turbine engines in commercial and military aircrafts and helicopters as well as in aero-derivative gas turbines. It is tailor-made to address the following requirements regarding low coking propensity, high resistance to oxidation and thermal degradation, high electrical conductivity. Therefore TURBONYCOIL 640 is recommended for use in hot running engine designs where evidence of oil coking and/or oil degradation was noted.

- Turbine oil of commercial and military aircrafts and helicopters, recommended in hot engines
- Accessories (APU, IDG, starter)
- Main and tail helicopter gearbox
- Aero-derivative gas turbines : recommended for Rolls-Royce 501K-B7, 501K-B7S and 501K-B7C.

CHARACTERISTIC	UNIT	TYPICAL RESULT	SAE AS 5780 HPC LIMIT	TEST METHOD
Kinematic viscosity **at 100°C** **at 40°C** **at - 40°C**	mm^2/s	 4.98 24.6 9000	 4.90 - 5.40 min. 23.0 max. 13000	ASTM D445
Density @ 20°C	kg/dm^3	0.994	-	ASTM D4052
Viscosity stability, 72 hrs at -40°C, % change	%	0.6	max. +/- 6	FED-STD-791-3458
Evaporation loss, 6 h 30 at 204°C	%w	3.1	max. 10.0	ASTM D972
Flash point, COC	°C	264	min. 246	ASTM D92
Pour point	°C	- 60	max. - 54	ASTM D97
Acid number	mg KOH/g	0.22	max. 1.00	SAE-ARP-5088
Shear stability, viscosity loss	%	- 0.1	max. 4	ASTM D 2603
AMS 3217/4 Rubber Swell, 72 hrs at 204°C	%	18.2	5 - 25	FED-STD-791-3604
Foaming test (tendency/stability) **at 24°C** **at 94°C** **at 24°C after 94°C**	cm^2/min	 5/0 5/0 5/0	 max. 25/0 max. 25/0 max. 25/0	ASTM D892
Thermal stability and corrosivity, 96 h at 274°C **Viscosity change at 40°C** **Acid number change** **Steel weight change**	 % mg KOH/g mg/cm^2	 0.04 0.4 0.02	 max. +/- 5.0 max. 6.00 max. +/- 4.00	FED-STD-791-3411
HLPS Dynamic coking at 375°C **Deposit after 20 h** **Deposit after 40 h**	mg	 0.15 0.24	 max. 0.4 max. 0.6	SAE-ARP-5996
Electrical conductivity, at 20°C	pS/m	1500	-	ASTM D2624

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