



## SYNTHETIC AVIATION TURBINE OIL

TU 38 1011299-90 - IPM-10

### DESCRIPTION

**Turbonycoil 210 A** is based on a blend of synthetic hydrocarbons and esters with a viscosity of 3.7 cSt at 100°C. It contains a carefully selected package of anti-oxidant and anti-wear additives. It offers a unique combination of high resistance to oxidati

### APPLICATIONS

**Turbonycoil 210 A** has been designed for the lubrication of the latest generation of gas turbines of Russian design.

It has been approved by CIAM (Central Institute of Aircraft engines) as an analog to the Russian type IPM-10.

**Turbonycoil 210 A** is validated for use on the following engines/aircraft (military and civil) :



ENGINE	AIRCRAFT
Aviadvigatel PS 90A	TU-204 ; Il 76M ; Tu-334
Progress ZMKB D-36	Yak-42 ; An-74
Progress ZMKB D-136	Mi-26
Progress ZMKB D-436T	Su-26 M
Soyuz R29-300/R27-300	Mig 22 ; 23 and 27 ; Yak 38 ; Yak 41 ; Su 22
Kuznetsov NK-25	Tu-22 Backfire
Kuznetsov NK-144	Tu-26 ; Tu-160 Blackjack
NPO Saturn AL-21 F	Su-20 ; Su-17M ; Tu-28 P
NPO Saturn AI-31 F	Su-24 ; Su-27
Klimov RD-33	Mig 29

**Turbonycoil 210 A** is also recommended for a large number of APU (VCU) and turbocoolers fitted on Russian aircrafts. It can also be used as substitute for 36/1-KuA (Tu 38 101 384) and VNII NP-50-1-4f (GOST 13076).

CHARACTERISTIC	UNIT	TYPICAL RESULT	LIMIT	TEST METHOD
Appearance	-	limpid	-	visual examination
Density at 20°C	kg/dm <sup>3</sup>	0.830	min. 0.820	ASTM D4052
Kinematic viscosity at 100°C at 40°C at - 40°C (after 35 minutes)	mm <sup>2</sup> /s	3.70 15.8 2500	min. 3.50 report min. 3000	ASTM D445

Pour point	°C	- 60	max. - 50	ASTM D97
Flash point, COC	°C	222	min. 190	ASTM D92
Total acid number	mg KOH/g	0.07	max. 0.10	ASTM D664
Water content	mg/kg	20	max. 500	ASTM D1533
Foaming test at 24°C (tendency/stability)	cm <sup>3</sup> /cm <sup>3</sup>	10/0	max. 50/0	ASTM D892
Thermo-oxidative stability, 50 h at 200°C				
Total acid number	mg KOH/g	6.9	max. 8.0	GOST 23797
Viscosity at 100°C	mm <sup>2</sup> /s	5.3	max. 6.0	
Metal specimen weight change :	mg/cm <sup>2</sup>			
Steel SHKH-15		0.0	0	
Aluminium AK-4		0.0	0	
Copper		0.0	max. +/- 0.20	
Insoluble in isooctane	%w	0.007	max. 0.1	

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.