Technical Data Sheet

AeroShell **Turbine** *Oil 750*

Synthetic lubricating oil for aircraft turbine engines

DESIGNED TO MEET CHALLENGES

Main Applications

- AeroShell Turbine Oil 750 was developed to meet the requirements of DERD 2487 (now DEF STAN 91-98) and to provide a high standard of lubrication in British civil gas turbines, particularly turbo-prop engines where a good load carrying oil was required for the propeller reduction gearbox.
- AeroShell Turbine Oil 750 is also approved by the Russian authorities as an analogue to MN-7.5u and for those Russian turbo-prop applications which require the use of mixtures of mineral turbine oil and aircraft piston engine oil.
- AeroShell Turbine Oil 750 contains a synthetic ester oil and should not be used in contact with incompatible seal materials and it also affects some paints and plastics.

Specifications, Approvals & Recommendations

- DEF STAN 91- 98
- French: Equivalent AIR 3517A
- Russia: Analogue TU 38.1011722- 85 Grade MN-7.5u
- NATO Code O-149 (equivalent O-159)
- Joint Service Designation OX-38

AeroShell Turbine Oil 750 is approved for use in all models of the following engines:

- Rolls-Royce: Dart and Gnome
- Safran Helicopter engines: Astazou, Artouste, Marbore
- Honeywell: All APUs for 7.5cSt oils
- Helicopter Transmissions: Sikorsky S61N

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	DEF STAN 91-98	Typical
Oil type				Synthetic ester	Synthetic ester
Density	@15°C	kg/m^3	ISO 12185	Report	951
Kinematic Viscosity	@100°C	mm^2/s	ASTM D445	7.35 min	7.65
Kinematic Viscosity	@40°C	mm^2/s	ASTM D445	36.0 max	32
Kinematic Viscosity	@-40°C	mm^2/s	ASTM D445	13 000 max	11 531
Pour Point		°C	ASTM D97	-54 max	-60
Flash Point		°C	ASTM D92	216 min	249
Total Acidity		mgKOH/g	SAE-ARP-5088	Report	0.03
Foaming Characteristics Sequences I,II,III Tendency/Stability		ml/ml	ASTM D892	Must pass	Passes
Trace metal content		ppm	ASTM D4951	Must pass	Passes
Elastomer compatibility, % weight change after 24/120 hours Nitrile			Def Stan 05-50 (Part 61) Method 22	Must pass	Passes
Elastomer compatibility, % weight change after 24/120 hours Fluorocarbon			Def Stan 05-50 (Part 61) Method 22	Must pass	Passes
Elastomer compatibility, % weight change after 24/120 hours LCS Fluorocarbon			Def Stan 05-50 (Part 61) Method 22	Must pass	Passes

Properties		Method	DEF STAN 91-98	Typical
Elastomer compatibility, % weight change after 24/120 hours Silicone		Def Stan 05-50 (Part 61) Method 22	Must pass	Passes
Solid particle contamination - sediment	mg/l	FED-STD-791 M.3010	10 max	<10
Solid particle contamination - total ash of sediment	mg/l	FED-STD-791 M.3010	1 max	<1
Corrosivity		Def Stan 05-50 (Part 61) Method 3	Must pass	Passes
High temperature oxidative stability		Def Stan 05-50 (Part 61) Method 9	Must pass	Passes
Load carrying ability		IP 166	Must pass	Passes

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

- **Health and Safety**

  This product is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

  Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

  Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from https://www.epc.shell.com

- **Protect the Environment**

  Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **Advice**

  Advice on applications not covered here may be obtained from your Shell representative.