

AeroShell Turbine Oil 750

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

- Approved DEF STAN 91-98 (replaces DERD 2487) (UK)
- Equivalent AIR 3517A (French)
- Analogue to TU 38.1011722- 85 Grade MN-7.5u (Russian)
- 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:
- Honeywell : Auxiliary Power Units (some models)
- Pratt & Whitney Canada : PT6 (some models)
 BMW-Rolls-Royce : Dart, Tyne, Avon (some early models only),
 Gnome, Pegasus, Palouste, Nimbus, Proteus, Orpheus,
 Olympus 200 and 300

Sikorsky : S-61N transmissions

Soloviev : D30 engine

Turbomeca : Astazou, Bastan, Turmo, Artouste, Arriel, Malika

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

Properties			DEF STAN 91-98	Typical
Oil type			Synthetic ester	Synthetic ester
Density	@15ºC	kg/l	Report	0.947
Kinematic viscosity	@100°C	mm²/s	7.35 min	7.47
Kinematic viscosity	@40°C	mm²/s	36.0 max	32
Kinematic viscosity	@-40°C	mm²/s	13000 max	10140
Kinematic viscosity after storage @-54° for 12 hrs	@-40°C	mm²/s	-	10800
Flashpoint Cleveland Open Cup		°C	216 min	242
Pourpoint		°C	-54 max	Below -54
Total Acidity		mgKOH/g	Report	0.03
Foaming characteristics			Must pass	Passes
Sediment		mg/l	10 max	Less than 10
Total ash of sediment		mg/l	1 max	Less than 1
Trace element content			Must pass	Passes
Elastomer swell tests			Must pass	Passes
Corrosivity, metal weight change			Must pass	Passes
Gear Machine Rating			Must pass	Passes
Shear Stability - viscosity change	@40°C	%	2 max	Less than 2

Typical Physical Characteristics

Properties		DEF STAN 91-98	Typical
Shear Stability - condition of oil		Must pass	Passes
Compatibility and miscibility	@210°C	Must pass	Passes
Homogeneity	@210°C	Must pass	Passes
Homogeneity	@-40°C	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

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from http://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.