Technical Data Sheet

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.

Typical Physical Characteristics

Properties			Method	DEF STAN 91-98	Typical
Oil type				Synthetic ester	Synthetic ester
Density	@15°C	kg/l		Report	0.947
Kinematic viscosity	@100°C	mm^2/s		7.35 min	7.47
Kinematic viscosity	@40°C	mm^2/s		36.0 max	32
Kinematic viscosity	@-40°C	mm^2/s		13000 max	10140
Kinematic viscosity after storage @-54° for 12 hrs	@-40°C	mm^2/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

Properties		Method	DEF STAN 91-98	Typical
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
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.