



# AeroShell Turbine Oil 3

## Mineral lubricating oil for aircraft turbine engines

AeroShell Turbine Oil 3 is a 3 mm<sup>2</sup>/s mineral turbine oil blended from mineral base stocks to which an anti-corrosion additive has been added.

### DESIGNED TO MEET CHALLENGES

#### Main Applications

- AeroShell Turbine Oil 3 was developed for early pure jet engines and is still approved for some versions of these engines plus the Turbomeca Astazou, Artouste, Turmo, Bastan and Marbore engines.
- AeroShell Turbine Oil 3 is widely used for inhibiting fuel systems and fuel system components during storage.
- AeroShell Turbine Oil 3 is an analogue to the Russian Grade MK-8 and can therefore be used in engines which require the use of MK-8. It is also used as the mineral turbine oil component in the mixture of mineral turbine oil and piston engine oil used in Russian turbo-prop engines.

#### Specifications, Approvals & Recommendations

- DEF STAN 91-99
- French: AIR 3515/B
- Russia: MK-8
- NATO Code O-135 and O-134
- Joint Service Designation OM-11 and OM-13
- DEF STAN 91-44

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

#### Typical Physical Characteristics

Properties		Method	DEF STAN 91-99	Typical
Oil type			Mineral	Mineral
Density	@15°C kg/m <sup>3</sup>	ISO 12185	-	875
Kinematic Viscosity	@40°C mm <sup>2</sup> /s	ASTM D445	12.0 min	12.66
Kinematic Viscosity	@-25°C mm <sup>2</sup> /s	ASTM D445	1 250 max	1 149
Pour Point	°C	ASTM D97	-45 max	<-50
Flash Point	°C	ASTM D93	144 min	148
Total Acid Number	mg KOH/g	ASTM D664	0.30 max	0.18
Strong acid number	mgKOH/g	IP 177	Nil	Nil
Copper corrosion 3 hrs	@100°C	ASTM D130	Must Pass	Passes
Saponification number	mgKOH/g	ASTM D94	1 max	0.35
Ash	%m	IP 4	0.01 max	0.001
Aromatic content	%	Def Stan 05-50 Part 65	10 max	6.9
Oxidation - total acid number increase	mgKOH/g	DEF STAN 91-99/2 Annex A	0.7 max	0.24
Oxidation - asphaltenes	%m	DEF STAN 91-99/2 Annex A	0.35 max	0.02

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 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.