



AeroShell Turbine Oil 3

Mineral lubricating oil for aircraft turbine engines

AeroShell Turbine Oil 3 is a 3 mm²/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 ³ | ISO 12185 | - | 875 |
| Kinematic Viscosity | @40°C mm ² /s | ASTM D445 | 12.0 min | 12.66 |
| Kinematic Viscosity | @-25°C mm ² /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.