



# AeroShell Oil 80

AeroShell straight mineral oils are blended from selected high viscosity index base stocks. These oils do not contain additives except for a small quantity of pourpoint depressant (which is added when improved fluidity at very low temperature is required) and an anti-oxidant.

## DESIGNED TO MEET CHALLENGES

### Main Applications

- AeroShell Oils are available in four different viscosity grades:  
AeroShell Oil 65 - AeroShell Oil 80 - AeroShell Oil 100 - AeroShell Oil 120.
- The suffix for each grade corresponds to the viscosity of the oil at 210°F in Saybolt Universal Seconds.
- The appropriate grades of these AeroShell Oils are approved for use in four-stroke cycle (four-cycle) certified aircraft reciprocating piston engines (except Porsche) and other aircraft radial engines which use oil to specification SAE J-1966 (MIL-L-6082) and which do not require use of an oil containing a dispersant additive. AeroShell Oils are used primarily during break-in of most new or recently overhauled four-stroke cycle aviation piston engines. The duration and lubrication recommendations for break-in vary, so operators should refer to the original engine manufacturer and/or overhaul facility for specific recommendations.

### Specifications, Approvals & Recommendations

- The U.S. Specification SAE J-1966 replaces MIL-L-6082E.
- Although it was planned to replace the British Specification DERD 2472 with a DEF STAN specification this has now been put into abeyance and instead the SAE specification has been adopted.
- U.S. : Approved J-1966 SAE Grade 40
- British : Approved J-1966 SAE Grade 40
- French : (AIR 3560/D Grade SAE 40)
- Russian : MS-14
- Joint Service Designation : OM-170

( ) indicates the product is equivalent to specification.

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

### Typical Physical Characteristics

| Properties                    |                           | Method     | Typical   |
|-------------------------------|---------------------------|------------|-----------|
| SAE Viscosity grade           |                           |            | 40        |
| Colour                        |                           | ASTM D1500 | 5         |
| Density                       | @15°C kg/l                | ASTM D1298 | 0.880     |
| Kinematic viscosity           | @40°C mm <sup>2</sup> /s  | ASTM D445  | 140       |
| Kinematic viscosity           | @100°C mm <sup>2</sup> /s | ASTM D445  | 14.6      |
| Viscosity Index               |                           | ASTM D2270 | Above 94  |
| Pourpoint                     | °C                        | ASTM D97   | Below -17 |
| Flashpoint Cleveland Open Cup | °C                        | ASTM D92   | Above 240 |
| Total acidity                 | mgKOH/g                   | ASTM D664  | <0.1      |
| Sulphur                       | % m                       | ASTM D129  | 0.45      |
| Copper corrosion              | @100°C                    | ASTM D130  | 1         |
| Ash content                   | % m                       | ASTM D482  | 0.006     |

These products are made in more than one location and the approval status and typical properties may vary between locations.

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.

