Technical Data Sheet

# AeroShell Oil *W100 Plus*

**AeroShell Oil W100 Plus is a new single grade oil that combines the single grade, ashless dispersant performance found in AeroShell Oil W100 and the anti-wear/anti-corrosion additives of AeroShell Oil W15W-50 Multigrade. It is the oil for pilots who prefer a single grade but who also want the extra protection and performance.**

## DESIGNED TO MEET CHALLENGES

### Performance, Features & Benefits

- Blended from selected high viscosity mineral base oils.
- Contains AeroShell's proven W Oils additive package.
- Additional anti-wear additives (containing Lycoming additive LW 16702).
- Additional anti-corrosion additives.
- Fully compatible with other approved aircraft piston engine oils.

### Main Applications

- The advanced additives in AeroShell Oil W100 Plus provide better rust and wear protection than conventional single grades. The additives work as a protective barrier to prevent critical parts from being slowly degraded by rust or wear, especially when an aircraft sits idle. This protection helps keep the camshaft and lifters coated, reducing the likelihood of premature damage and helping operators reach TBO.

### Specifications, Approvals & Recommendations

- Approved SAE J-1899 SAE Grade 50
- AeroShell Oil W100 Plus already contains, in the correct proportions, an anti-wear additive equivalent to the Lycoming additive LW 16702; thus it already complies with FAA Airworthiness Directive 80-04-03. Operators who use AeroShell Oil W100 Plus DO NOT need to add this Lycoming additive to the oil.
- AeroShell Oil W100 Plus is qualified for use in all Teledyne Continental Motors liquid cooled and air cooled aircraft piston engines.
- Textron Lycoming : 301F; Service Bulletin 446E and 471B; Service Instruction 1409C
- Teledyne Continental : SIL 99-2
- FAA : Airworthiness Directive 80-04-03 R2

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

### Typical Physical Characteristics

| Properties | | | Method | Typical W 100 Plus |
|---|---|---|---|---|
| Colour | | | ASTM D1500 | <3.0 |
| Density | @15°C | kg/l | ASTM D1298 | 0.893 |
| Kinematic viscosity | @40°C | $mm^2/s$ | ASTM D445 | 195 |
| Kinematic viscosity | @100°C | $mm^2/s$ | ASTM D445 | 19.96 |
| Viscosity Index | | | ASTM D2270 | 116 |
| Pour Point | | °C | ASTM D97 | -21 |
| Flash Point | | °C | ASTM D92 | 288 |
| Total acidity | | mgKOH/g | ASTM D664 | 0.02 |
| Sulphur | | % m | ASTM D129 | 0.26 |
| Copper corrosion | @100°C | | ASTM D130 | 1B |
| Ash content | | % m | ASTM D482 | 0.002 |

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.