



# AeroShell Oil *Sport Plus 4*

## *Synthetic lubricating oil for aircraft piston engines (4-stroke)*

Developed in conjunction with ROTAX®, AeroShell Oil Sport Plus 4 is the first oil specifically developed for light sport aviation piston engines such as the ROTAX® 912 & 914 series. A combination of low cylinder head temperature (compared with air cooled engines), low oil consumption and the engine internals requires a blend of high quality hydrocarbon base stocks, incorporating synthetic technology which allows full performance with different fuel types. This oil can be used in all climates.

### DESIGNED TO MEET CHALLENGES

#### Performance, Features & Benefits

- Helps keep engines sludge and varnish free.
- Helps reduce oil consumption.
- Helps engines reach TBO (Time Between Overhauls).
- Protects highly stressed engines parts against scuffing and wear.
- Anti-foaming additives to maximise lubrication effectiveness – especially for those engines operating an integrated gearbox.
- Better cold flow Characteristics for easier starts and quicker protection.
- High thermal stability for longer-lasting and safer lubrication.
- Can be used in any climate.
- Advanced anti-rust and anti-wear package.

#### Main Applications

- AeroShell Oil Sport Plus 4 is intended for use in four-stroke (four-cycle) aircraft piston engines that are of an original automotive design and which cannot, therefore, use traditional Ashless Dispersant aircraft engine oil types. These engines include carburetted, fuel-injected and turbocharged types such as the Rotax® 912 & 914 series.
- AeroShell Sport Plus 4 may be used in integrated gearbox and wet clutch systems.

- AeroShell Oil Sport Plus 4 can be used in engines which operate on both unleaded Gasoline and Avgas 100LL. The correct choice of additives and good solvent properties allow the oil to handle lead by-products that can form a semi solid sludge in the oil which can restrict oil passages and compromise lubrication. AeroShell Oil Sport Plus 4 is superior in this respect to those oil types intended for automotive/motorcycle Application.
- Please refer to Operators Handbook/Manual for the correct oil drain interval when operating on different fuels.

#### Specifications, Approvals & Recommendations

- ROTAX® RON 424
- Listed in Rotax Service Instruction SI-912i-01/SI-0912-016/SI-914-019 "Selection of Suitable Operating Fluids for Rotax Engine Type 912 and 914 (Series)" as an Aviation oil tested and released by BRP-Powertrain, for use with both leaded Avgas and unleaded fuel.
- Do not use AeroShell Oil Sport Plus 4 in engines that are designed to use Ashless Dispersant aviation piston engine oils. This includes air-cooled Continental Motors and Textron Lycoming engines.
- Please consult Operating Handbook/Manual to confirm the correct lubricant specification before use.  
For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

## Typical physical Characteristics

Properties			Method	AeroShell Oil Sport Plus 4
SAE Viscosity Grade				10W-40
Density	@ 15°C	kg/m <sup>3</sup>	ASTM D4052	868
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ASTM D445	14.2
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ASTM D445	94.2
Dynamic Viscosity	@-25°C	mPa.s	ASTM D5293	5 975
Pour Point		°C	ASTM D97	-39
Flash Point		°C	ENI ISO 2592	228
Phosphorus		%m	ASTM D4927	0.196
Zinc		%m	ASTM D4927	0.220
Calcium		%m	ASTM D4927	0.284

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.

