



# AeroShell Oil *Sport Plus 4*

*Semi-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

- First specific oil for Light Sport and Very Light/Ultra light aircraft engines.
- Promotes engine cleanliness.
- 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 D1298	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	EN 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

This product is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used coolant. After skin contact, wash immediately with soap and water.

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.