



AEROSHELL OIL DIESEL 10W-40

AeroShell Oil Diesel 10W-40 is a fully synthetic, multigrade engine oil designed for use in the new generation of compression ignition (Diesel) Aviation Piston Engines. The formulation has been selected to be suitable in piston engines fuelled by Jet A or Jet A-1 and is designed for use in the latest highly rated turbocharged diesel engines under all operating conditions. AeroShell Oil Diesel 10W-40 MUST NOT be used in spark ignition, or Avgas powered aircraft engines.

APPLICATIONS

AeroShell Oil Diesel 10W-40 is unique in being the only fully synthetic engine oil available in General Aviation. It also contains unique Shell approved additives to provide superior piston cleanliness resulting in a clean, efficient and reliable engine. These additives include a powerful surface acting additive, which bonds to the surface of highly loaded engine parts, protecting the engine from scuffing damage.

AeroShell Oil Diesel 10W-40 has been developed to be suitable for use in engines burning Jet fuel and its performance has been optimised to cope with the demands of this type of engine. Its key performance features include the ability to sustain high bearing loads, neutralisation of acid build up from the sulphur present in the fuel and high dispersancy to allow for the relatively high particle loading produced when burning Jet fuel.

During development, AeroShell Oil Diesel 10W-40 has amassed around 40,000 hours in engine- and flight-testing. It has been used throughout the SMA engine development program and during Thielert engine development testing; it is fully approved by both manufacturers. Further approvals are being sought as other engines are developed for this emerging market.

SPECIFICATIONS – No Aviation specifications yet defined.

U.S.	-
British	-
French	-
Russian	-
NATO Code	-
Joint Service Designation	-
ACEA	E4, E5 equivalent
API	CF equivalent

ENGINE MANUFACTURER'S APPROVALS

AeroShell Oil Diesel 10W-40 is approved for use in the following engines. Whilst this is correct at the time of writing, testing is ongoing to extend this approval listing as new engines are produced.

SMA Engines	SR 305 (Later models yet to be produced)
Thielert Engines	1.7 Centurion (Other models yet to be produced)

PROPERTIES	TYPICAL
Oil type	Fully Synthetic Hydrocarbon
SAE Viscosity Grade	Multigrade 10W-40
Density @ 15 °C	0.859
Viscosity Index	Above 160
Base oil viscosity mm ² /s @ 40 °C	93.0
@ 100 °C	14.6
Pour Point °C	-38
Flash Point Cleveland Open Cup °C	220
Total Base Number mgKOH/g	16.0
Sulphated Ash Content % m	1.9

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