Piston Engine

AEROSHELL OILS 65, 80, 100 and 120

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.

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 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

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.

AEROSHELL OIL	65	80	
U.S.	Approved J-1966 SAE Grade 30	Approved J-1966 SAE Grade 40	
British	_	Approved J-1966 SAE Grade 40	
French	(AIR 3560/D Grade SAE 30)	(AIR 3560/D Grade SAE 40)	
Russian	_	MS-14	
NATO Code	O-113 Obsolete	_	
Joint Service Designation	OM-107 Obsolete	OM-170	

Continued

AEROSHELL OIL	100	120
U.S.	Approved J-1966 SAE Grade 50	Approved J-1966 SAE Grade 60
British	Approved J-1966 SAE Grade 50	_
French	(AIR 3560/D Grade SAE 50)	_
Russian	MS-20	_
NATO Code	O-117 Obsolete	_
Joint Service Designation	OM-270	OM-370 Obsolete

() indicates the product is equivalent to specification.

Typical Properties	65	80	100	120
SAE viscosity grade	30	40	50	60
Colour ASTM	4.5	5.0	5.0	6.0
Density @ 15°C kg/l	0.887	0.892	0.896	0.898
Kinematic viscosity mm²/s @ 100°C @ 40°C	11.8	14.6 150	19.7 230	24.8
Viscosity Index	94	Above 94	Above 94	94
Pourpoint °C	-20	Below –17	Below –17	-11
Flashpoint Cleveland Open Cup °C	230	Above 240	Above 250	250
Carbon residue % m	0.2	0.3	0.4	0.5
Total acidity mgKOH/g	<0.1	<0.1	<0.1	<0.1
Sulphur % m	0.1	0.13	0.13	0.15
Copper corrosion @ 100°C	1	1	1	1
Ash content % m	0.006	0.006	0.006	0.006

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