

AeroShell

Product specification guide

October 2023

AeroShell grade	Specifications	NATO code	Joint Service Designation	Product description and application	Remarks			
Piston engine oils								
AeroShell Oil 65	SAE J1966 Grade 30	O-113 (obsolete)	OM-107 (obsolete)	Straight mineral (breakin) piston engine oil	Product discontinued in Dec 2020.			
AeroShell Oil 80	SAE J1966 Grade 40	O-115 (obsolete)	OM-170	Straight mineral (breakin) piston engine oil	-			
AeroShell Oil 100	SAE J1966 Grade 50	O-117 (obsolete)	OM-270 (obsolete)	Straight mineral (breakin) piston engine oil	-			
AeroShell Oil 120	SAE J1966 Grade 60	O-128 (obsolete)	OM-370 (obsolete)	Straight mineral (breakin) piston engine oil	-			
AeroShell Oil W80	SAE J1899 Grade 40	O-123 (obsolete)	OMD-160	Ashless dispersant, mineral singlegrade piston engine oil	-			
AeroShell Oil W100	SAE J1899 Grade 50	O-125 (obsolete)	OMD-250	Ashless dispersant, mineral single-grade piston engine oil	-			
AeroShell Oil W80 Plus	SAE J1899 Grade 40	-	-	Ashless dispersant, premium mineral single-grade piston engine oil	Approved for Lycoming SB 446E & 471B, AMOC FAA AD 80-04-03R2 p.1b			
AeroShell Oil W100 Plus	SAE J1899 Grade 50	-	-	Ashless dispersant, premium mineral single-grade piston engine oil	Approved for Lycoming SB 446E & 471B, AMOC FAA AD 80-04-03R2 p.1b			
AeroShell Oil W120	SAE J1899 Grade 60	O-128 (obsolete)	OMD-370	Ashless dispersant, mineral single grade piston engine oil	-			
AeroShell Oil W15W-50	SAE J1899 Grade Multigrade	O-162 (obsolete)	OMD-162	Ashless dispersant, semi-synthetic multigrade piston engine oil	Approved for Lycoming SB 446E & 471B, AMOC FAA AD 80-04-03R2 p.1b			
AeroShell Oil Sport Plus 4	API SL* Rotax RON 424	-	-	Dedicated aviation oil for four-stroke light sport and microlight engines. Recommended by Rotax Viscosity grade 10W-40.	Rotax Service Instruction for Suitable Operating Fluids SI912/SI912i/SI914/SI915. Do not use in engines designed to use SAE J1899 or J1966.			
AeroShell Oil Diesel Ultra	ACEA A3/B4* API SL/CF* (No aviation specifications yet defined)	-	-	Fully synthetic dedicated dieselengine aviation oil. Viscosity grade 5W30.	Approved for former Thielert/Centurion current Continental Diesel 1.7 and 2.0, Austro Engine AE300 and SMA SR305-230E engines			
Turbine engine oils								
AeroShell Turbine Oil 2	MIL-PRF-6081E Grade 1010 & 1010N	O-133	OM-10 (obsolete)	2 mm ² /s mineral fuel system inhibiting oil.	-			
AeroShell Turbine Oil 3	DEF STAN 91099	O-135	OM-11	3 mm ² /s mineral fuel system inhibiting oil. Equivalent to and replaces AeroShell Fluid 1.	-			
AeroShell Turbine Oil 308	MILPRF-7808M Grade 3	O-148	OX-9	3 mm ² /s synthetic ester aviation turbine oil.	-			
AeroShell Turbine Oil 390	DEF STAN 91094	-	OX-7	3 mm ² /s synthetic diester aviation turbine oil.	-			
AeroShell Turbine Oil 500	MILPRF-23699G Grade STD SAE AS5780D Grade SPC DEF STAN 91-101 Grade OX-27	O-156	OX-27	Standard grade 5 mm²/s synthetic ester aviation turbine oil.	-			
AeroShell Turbine Oil 555	DOD-PRF-85734A DEF STAN 91100*	O-160	OX-26	5 mm ² /s synthetic esteroil for engines and helicopter transmissions.	-			
AeroShell Turbine Oil 560	MILPRF-23699G Grade HTS SAE AS5780D Grade SPC DEF STAN 91101 Grade OX-27*	0-154	OX-27	High thermal stability 5 mm ² /s synthetic ester aviation turbine oil.	-			
AeroShell Turbine Oil 750	DEF STAN 91098	0-149	OX-38	$7.5~\text{mm}^2/\text{s}$ synthetic ester aviation turbine engine oil.	-			
AeroShell Ascender	MILPRF-23699G Grade HTS SAE AS5780D Grade HPC DEF STAN 91-101 Grade OX-27*	O-154	OX-27	High performance capability 5 mm ² /s synthetic hindered ester aviation turbine oil.	-			

Notes

^{*}AeroShell grade meets the requirements of the listed specification but is not necessarily fully approved to that specification. Unit of measure for viscosities are shown as mm^2/s , (millimetres squared per second). $1 mm^2/s = 1$ centiStoke (cSt)

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Aviation greases							
AeroShell Grease 5	MILG-3545C* (obsolete) DTD.878A* (obsolete)	G-359 (obsolete)	XG-277 (obsolete)	Mineral clay based grease for use in wheel- bearings and engine accessories	Available in the Americas only. DTD transferred to DEF STAN 91-52, NATO XG-293		
AeroShell Grease 6	MILPRF-24139B DEF STAN 91028* MILG-7711A* (obsolete) DEF STAN 91012* (obsolete)	G-450 (obsolete) G-382	XG-271 (obsolete) XG-274 (obsolete)	General purpose mineral clay based airframe grease for use in bearings and gearboxes	-		
AeroShell Grease 7	MIL-PRF-23827C (Type II)	_	-	Multipurpose synthetic ester clay based airframe grease	-		
AeroShell Grease 14	MILG-25537C DEF STAN 91051	G-366	XG-284	Multipurpose helicopter grease, mineral base oil thickened with calcium soap	-		
AeroShell Grease 22	MILPRF-81322G MILPRF-24508B DEF STAN 91-052*	G-395	XG-293	General purpose, synthetic hydrocarbon clay based aircraft grease	-		
AeroShell Grease 33	MILPRF-23827C (Type I) DEF STAN 91053* SAE AMS3052A BMS 3-33C AIMS 09-06002	G-354	-	Multipurpose lithium complex airframe grease with synthetic base oil	-		
AeroShell Grease 64	MILG-21164D DEF STAN 91057	G-353	XG-276	Synthetic hydrocarbon lithium complex airframe grease Possesses extreme-pressure characteristics provided by 5% molybdenum disulphide	-		
AeroShell Grease 58	SAE AMS3058 AIMS 09-06-003	-	-	New generation of lithium complex grease for aircraft wheel bearings	-		
Hydraulic fluids							
AeroShell Fluid 4	MILH-5606A* (obsolete) DEF STAN 91-048 Grade Normal*	-	-	Mineral hydraulic oil with very good low- temperature characteristics, dyed red	Product discontinued in Dec 2020.		
AeroShell Fluid 31	MIL-PRF-83282D	H-537	OX-19	Super-clean, fire-resistant, synthetic hydrocarbon PAO based hydraulic fluid, dyed red	-		
AeroShell Fluid 41	MILPRF-5606J DEF STAN 91-048 Grade Superclean	H-515	OM-15	Superclean, mineral hydraulic fluid, dyed red	-		
AeroShell Fluid 61	MIL-PRF-46170E (Type I)	H-544	-	Super-clean, preservative, synthetic hydrocarbon hydraulic fluid, undyed	Type I is undyed (Type II is dyed red)		
AeroShell LGF	BMS 3-32C (Type II)	-	-	Extreme-pressure operational mineral hydraulic landing gear fluid, dyed yellow	-		
Specialist fluids							
AeroShell Fluid 2XN	MIL-C-6529C Type I	C- 608	ZX-21 (obsolete)	Engine preservative mineral concentrate with ashless anti-corrosion additives for PEO.	-		
AeroShell Fluid 3	MILPRF-7870E DEF STAN 91-047* (obsolete)	0-142	OM-12 (obsolete)	General-purpose low-temperature mineral lubricating oil	-		
AeroShell Fluid 5M-A	MILPRF-6086F Grade Medium DEF STAN 91-112 Grade Medium	O-155	OEP-70	Medium-viscosity, extreme-pressure mineral gearbox oil	Product discontinued in Dec 2020.		
AeroShell Fluid 12	MILPRF-6085F DEF STAN 91-049*	0-147	OX-14*	Low-temperature, synthetic ester instrument lubricating oil	-		
AeroShell Fluid 602	MIL-PRF-87252E	S-1748	-	Synthetic avionic cooling fluid	Product discontinued in Dec 2020.		
AeroShell Fluid S.8350	DTD.900/4981A* (obsolete)	-	OEP-215	Extreme-pressure mineral helicopter gearbox oil	Used in Lynx and Wildcat MRGB.		
AeroShell Calibrating Fluid 2	MILPRF-7024G Type II	-	-	Special-run Stoddard solvent calibrating fluid for fuel systems	-		
AeroShell Compound 07	DTD.406B* (obsolete)	S-745	AL-5	Aircraft deicing fluid for inflight systems and on runway	-		
AeroShell Smoke Oil	-	-	-	Hydrocarbon fluid used in both piston engine and jet engine powered aviation aerobatic flight displays	Europe, Middle East & Asia Pacific version formulated with Re-Refined Base oil (RRBO). American version formulated with Shell Gasto-Liquid (GTL) Technology.		

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