

Shell Aviation

PRODUCT SPECIFICATION GUIDE (includes NSN)

AeroShell

FEBRUARY 2017



AeroShell product	US specifications	British specifications	NATO code	Joint service designation	NSN: quart can	NSN: 55-gallon drum	Product and application	Remarks
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PISTON ENGINE OILS

AeroShell Oil 65	SAE J-1966 Grade SAE 30	–	O-113 (obsolete)	–	–	9150-00-231-6669	Straight mineral (break-in) piston engine oil	Available in the USA only
AeroShell Oil 80	SAE J-1966 Grade SAE 40	SAE J-1966 Grade SAE 40	O-115 (obsolete)	OM-170	–	–	Straight mineral (break-in) piston engine oil	–
AeroShell Oil 100	SAE J-1966 Grade SAE 50	SAE J-1966 Grade SAE 50	O-117 (obsolete)	OM-270	9150-01-007-9134	9150-00-235-9059	Straight mineral (break-in) piston engine oil	–
AeroShell Oil 120	SAE J-1966 Grade SAE 60	SAE J-1966 Grade SAE 60	O-128 (obsolete)	OM-370	–	9150-01-432-0511	Straight mineral (break-in) piston engine oil	–
AeroShell Oil W80	SAE J-1899 Grade SAE 40	SAE J-1899 Grade SAE 40	O-123 (obsolete)	OMD-160	9150-00-168-6889 Type II 9150-00-019-5701 Type III	9150-00-753-4937 Type II 9150-00-965-2305 Type III	Ashless dispersant, mineral single-grade piston engine oil	–
AeroShell Oil W100	SAE J-1899 Grade SAE 50	SAE J-1899 Grade SAE 50	O-125 (obsolete)	OMD-250	9150-00-168-6889 Type II 9150-00-019-5701 Type III	9150-00-753-4937 Type II 9150-00-965-2305 Type III	Ashless dispersant, mineral single-grade piston engine oil	–
AeroShell Oil W80 Plus	SAE J-1899 Grade SAE 40	–	–	–	9150-00-168-6889 Type II 9150-00-019-5701 Type III	9150-00-753-4937 Type II 9150-00-965-2305 Type III	Ashless dispersant, premium mineral single-grade piston engine oil	Approved for Lycoming SB 446E and FAA AD 80-04-03R2
AeroShell Oil W100 Plus	SAE J-1899 Grade SAE 50	–	–	–	9150-00-168-6889 Type II 9150-00-019-5701 Type III	9150-00-753-4937 Type II 9150-00-965-2305 Type III	Ashless dispersant, premium mineral single-grade piston engine oil	Approved for Lycoming SB 446E and FAA AD 80-04-03R2
AeroShell Oil W120	SAE J-1899 Grade SAE 60	SAE J-1899 Grade SAE 60	O-128 (obsolete)	OMD-370	–	9150-00-753-4937 Type II 9150-00-965-2305 Type III 9150-01-016-8770	Ashless dispersant, mineral single grade-piston engine oil	–
AeroShell Oil W 15W-50	SAE J-1899 Grade Multigrade	SAE J-1899 Grade Multigrade Multigrade SAE 15VW-50	O-162 (obsolete)	OMD-162	9150-00-168-6889 Type II 9150-00-019-5701 Type III	9150-00-753-4937 Type II 9150-00-965-2305 Type III	Ashless dispersant, semi-synthetic multigrade piston engine oil	Approved for Lycoming SB 446E and FAA AD 80-04-03R2.
AeroShell Sport Plus 4	Rotax RON 424	–	–	–	–	–	Dedicated aviation oil for four-stroke light sport and micralight engines. Recommended by Rotax	Fully approved to Rotax specification RON 424 for all ROTAX® 912 and 914 series engines, Rotax Service Instruction for Suitable Operating Fluids SI-912/SI-912i/SI-914. Do not use in engines designed to use SAE J-1899 or 1966
AeroShell Oil Diesel Ultra	ACEA A3/B4 and API SL/CF*	–	–	–	–	–	Fully synthetic dedicated diesel-engine aviation oil	Approved for former Thielet/Centurion current Continental Diesel 1.7 and 2.0, Austro Engine AE300 and SMA SR305-230E engines Meets automotive specifications ACEA A3/B4 and API SL/CF (aviation specifications are yet to be defined)

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TURBINE ENGINE OILS

AeroShell Turbine Oil 2	MIL-PRF-6081E Grade 1010	–	O-133	OM-10 (obsolete)	–	9150-00-231-6676	Mineral 2 mm ² /s fuel system inhibiting oil	–
AeroShell Turbine Oil 3 ASF 1	–	DEF STAN 91-99	O-135	OM-11	–	–	Mineral 3 mm ² /s fuel system inhibiting oil. Equivalent to and replaces ASF 1	–
AeroShell Turbine Oil 308	MIL-PRF-7808L Grade 3	–	O-148	OX-9	9150-00-782-2627	–	Synthetic ester aviation turbine oil	–
AeroShell Turbine Oil 390	–	DEF STAN 91-94	–	OX-7	–	–	Synthetic diester aviation turbine oil	–
AeroShell Turbine Oil 500	MIL-PRF-23699G Grade STD SAE AS5780B Grade SPC	DEF STAN 91-101 Grade OX-27	O-156	OX-27	9150-01-476-1074 9150-01-419-0896	9150-01-476-1083	Standard grade, synthetic ester. Aviation turbine oil, 5 cSt viscosity	–
AeroShell Turbine Oil 555	DOD-PRF-85734A	DEF STAN 91-100	O-160	OX-26	9150-01-209-2684 9150-01-506-8715	–	Synthetic ester oil for engines and helicopter transmissions. High load-carrying ability, 5 cSt viscosity	–
AeroShell Turbine Oil 560	MIL-PRF-23699G Grade HTS SAE AS5780B Grade SPC	DEF STAN 91-100*	O-154	OX-27	9150-01-439-0756	9150-01-439-2070	High thermal stability synthetic ester aviation turbine oil, 5 cSt viscosity	–
AeroShell Turbine Oil 750	–	DEF STAN 91-98	O-149	OX-38	9150-01-152-7060	9150-00-935-4090 No longer available	Synthetic ester aviation turbine engine oil 7.5 cSt viscosity	–
AeroShell Ascender	MIL-PRF-23699G Grade HTS SAE AS5780 Grade HPC	–	O-154	–	9150-01-439-0756	9150-01-439-2070	High-performance, low-coking, 5 cSt viscosity, synthetic hindered ester delivering high thermal stability with excellent elastomer compatibility	–

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AVIATION GREASES

AeroShell Grease 5	MIL-G-3545C (obsolete)	DTD.878A (obsolete)*	G-359 (obsolete)	XG-277 (obsolete)	9150-01-093-3300	9150-01-093-3300	9150-01-093-3300	High-temperature Microgel® wheel-bearing and engine-accessory grease	DTD transferred to DEF STAN 91-52, NATO XG-293
AeroShell Grease 6	MIL-PRF-24139A MIL-G-7711A (obsolete)	DEF STAN 91-12 (obsolete)	G-382	XG-271 (obsolete)	9150-01-491-0907	9150-00-180-6382 9150-01-104-6161	9150-00-180-6383	General purpose Microgel airframe grease	Still available for civil market meeting, move to ASG 33 obsolete US and UK specifications
AeroShell Grease 7	MIL-PRF-23827C (Type II)	–	–	–	9150-00-935-4017 9150-01-527-1093 9150-01-479-8738	9150-00-985-7247 9150-00-965-2410	9150-00-985-7248	Multipurpose synthetic ester Microgel airframe grease	–
AeroShell Grease 14	MIL-G-25537C	DEF STAN 91-51	G-366	XG-284	9150-00-478-0055 9150-01-570-0689	9150-00-721-8570 9150-01-570-0689	9150-00-721-8581 9150-01-570-0689	Multipurpose mineral oil helicopter grease	–
AeroShell Grease 22	MIL-PRF-81322G NLGI Grade 2 DOD-G-24508A	DEF STAN 91-52	G-395	XG-293	9150-01-262-3358	9150-00-145-0268	9150-00-935-5851 9150-01-497-8982	General purpose, versatile, synthetic hydrocarbon, Microgel aircraft grease	–
AeroShell Grease 33	MIL-PRF-23827C (Type II) SAE AMS 3052**	DEF STAN 91-53	G-354	XG-287	9150-01-505-4294 9150-01-629-9806	9150-01-505-4294	9150-01-505-4294	Universal lithium complex airframe grease with a synthetic base oil	Approved to Boeing specification BMS 3-33B. Aviation industry moving to lithium complex grease. Approved to Airbus specification AIMS 09-06-002
AeroShell Grease 64 (formerly AeroShell 33MS)	MIL-G-21164D	DEF STAN 91-57	G-353	XG-276	9150-00-935-4018 9150-01-593-4715	9150-00-223-4004 9150-01-593-4715 9150-01-552-7148	9150-00-965-2003 9150-01-593-4715	Extreme-pressure, synthetic hydrocarbon, lithium complex, airframe grease	Possesses extreme-pressure characteristics provided by 5% molybdenum disulphide
AeroShell Grease 58	SAE AMS 3058**	–	–	–	–	–	–	New generation of lithium complex grease for aircraft wheel bearings	Will become the civil industry standard wheel-bearing grease

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HYDRAULIC FLUIDS

AeroShell Fluid 31	MIL-PRF-83282D	–	H-537	OX-19	–	9150-00-149-7432 9150-01-419-0969	–	–	Superclean, fire-resistant, synthetic hydrocarbon hydraulic fluid	PAO base
AeroShell Fluid 41	MIL-PRF-5606H	DEF STAN 91-48	H-515	OM-15	9150-00-252-6383 9150-01-515-7826	9150-00-223-4134 9150-01-515-7826 9150-01-592-7354	–	9150-00-265-9408 9150-01-515-7826	Superclean, mineral hydraulic fluid	–
AeroShell Fluid 4	MIL-H-5606A* (obsolete)	DEF STAN 91-48* Grade Normal	H-520	OM-18	–	9150-00-223-4134	–	9150-00-265-9408	Mineral hydraulic oil with very good low-temperature characteristics	Only available in Americas
AeroShell Fluid 61	MIL-PRF-46170E (Type I)	–	H-544	–	–	–	–	9150-01-158-0462	Superclean, preservative, synthetic hydrocarbon hydraulic fluid	Type I is undyed (Type II is dyed red)
AeroShell Fluid 71	MIL-PRF-6083G	DEF STAN 80-142	C-635	PX-26*	–	–	9150-00-935-9809	–	Superclean, preservative mineral hydraulic fluid	–
AeroShell SSF	–	–	–	–	–	–	–	–	Extreme-pressure preservative mineral hydraulic landing gear fluid	Qualified to Boeing BMS 3-32 Type 1
AeroShell LGF	–	–	–	–	–	–	9150-01-588-2834 9150-01-408-7376	–	Extreme-pressure operational mineral hydraulic landing gear fluid	Qualified to Boeing BMS 3-32 Type 2

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SPECIALIST FLUIDS

AeroShell Fluid 2XN	MIL-C-6529C Type II	DTD.900/4913A (obsolete)	C-608	ZX-21 (obsolete)	–	6850-00-209-7230	–	–	Engine preservative mineral concentrate	Ashless anti-corrosion additives for PEO
AeroShell Fluid 3	MIL-PRF-7870E	DEF STAN 91-47	O-142	OM-12	9150-00-273-2397	–	–	–	General-purpose low-temperature mineral lubricating oil	–
AeroShell Fluid 12	MIL-PRF-6085E	DEF STAN 91-49*	O-147	OX-14*	9150-01-311-5640	–	–	–	Low-temperature, synthetic ester instrument lubricating oil	–
AeroShell Fluid 5M-A	MIL-PRF-6086F Medium Grade	DEF STAN 91-112 Medium Grade	O-155	OEP-70	9150-00-223-4130	–	–	–	Medium-viscosity, extreme-pressure mineral gearbox oil	–
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	MIL-PRF-7024F Type II	–	–	–	–	–	–	–	Special-run Stoddard solvent calibrating fluid for fuel systems	–
AeroShell Compound 07	–	DTD.406B	S-745	AL-5	–	–	6850-01-146-9699	–	Aircraft de-icing fluid for in-flight systems and on runway	–
AeroShell Fluid 602	MIL-PRF-87252D	–	S-1748	–	–	–	–	–	Synthetic avionic cooling fluid	–

NOTES

* AeroShell grade meets the requirements of the listed specification but is not necessarily fully approved to that specification

** New specifications held by SAE International