



Lubricants Report



Technical Information from Shell Lubricants

TIP# 5.12.08

AEROSHELL* GREASES PREMIUM GREASES FOR AVIATION APPLICATIONS

PRODUCT LINE

AEROSHELL Grease 5 is a general aviation grease suitable for wheel bearings and high speed applications including magnetos, generators and starters operating in temperatures from -23°C to $+177^{\circ}\text{C}$.

AEROSHELL Grease 6 is a multi- purpose airframe grease for use in anti-friction bearings, gearboxes and plain bearings operating in temperatures between -40°C and $+121^{\circ}\text{C}$.

AEROSHELL Grease 7 is a multi- purpose grease that may be used on turbine engined aircraft. It is an advanced grease designed to cover a wide temperature range from -73°C to $+149^{\circ}\text{C}$.

AEROSHELL Grease 14 is designed for greasing applications on helicopters including main and tail rotor bearings, and splines. It has outstanding anti-fret properties and it may be used over the temperature range from -54°C to $+93^{\circ}\text{C}$.

AEROSHELL Grease 17 is a fully synthetic grease containing 5% molybdenum disulphide. It is particularly suitable for lubricating heavily loaded sliding surfaces such as bogie pins on aircraft landing gear assemblies over the temperature range of -73°C to $+149^{\circ}\text{C}$.

AEROSHELL Grease 22 is a fully synthetic grease designed for severe operating conditions including high bearing loads, high speeds and where long grease retention and high water resistance are required. **AEROSHELL Grease 22** covers the operating temperature from -65°C to $+204^{\circ}\text{C}$.

AEROSHELL Grease 33 is our newest generation multi-purpose synthetic grease. It is specifically designed to lubricate a wide range of applications and operating conditions on commercial aircraft. It is approved for Boeing's BMS 3-33 specification and it covers the operating temperature range between -73°C and $+121^{\circ}\text{C}$.

PERFORMANCE BENEFITS

- **AEROSHELL** greases have been developed for a wide variety of aircraft lubrication applications. Shell's innovative **Microgel*** thickener technology is used in several **AEROSHELL** greases to provide greases without the temperature limitations imposed by soap type thickeners. **Microgel** thickened greases also exhibit excellent load carrying ability and maintain consistency with variations in temperature. These factors help to make **Microgel** greases particularly suitable for a range of multi-purpose applications commonly found on aircraft. The multi-purpose features of many of the **AEROSHELL** greases enable users to lubricate their aircraft with fewer greases thus reducing inventory costs and minimizing the risk of misapplication of the wrong grease.

APPROVALS

AEROSHELL Grease 5	MIL-G-3545 (obsolete)
AEROSHELL Grease 6	MIL-G-24139
AEROSHELL Grease 7	MIL-PRF-23827
AEROSHELL Grease 14	MIL-G-25537
AEROSHELL Grease 17	MIL-G-21164
AEROSHELL Grease 22	MIL-G-81322 Grade A
AEROSHELL Grease 33	MIL-PRF-23827 ,BMS 3-33

TYPICAL PROPERTIES

PROPERTIES	Aeroshell G rease 5	Aeroshell G rease 6	Aeroshell Grease 7	Aeroshell G rease 14	Aeroshell G rease 17	Aeroshell G rease 22	Aeroshell Grease 33	
PRODUCT CODE	519-005	519-006	519-010	519-015	519-025	519-035	519-033	ASTM METHOD
Colour	Amber	Brown	Buff	Tan	Dark Gray	Tan	Green	Visual
Thickener	Microgel	Microgel	Microgel	Calcium	Microgel	Microgel	Lithium	Spec
Dropping Point, °C	+215	+215	+260	+148	+260	+260	+250	D 2265
Penetration @ 25 °C	281	287	283	267	287	271	290	D 217
Unworked	284	300	296	273	295	275	297	D 217
Worked								
Useful Temp. Range, °C	-23 to +177	-40 to +121	-73 to +149	-54 to +93	-73 to+149	-65 to +204	-73 to +121	Est.
Water Resistance, loss % m	0.5	2.0	0.8	7.2	1.0	0.5	<6	D 1264
Bomb Oxidation @ 98.9 °C	41	62	62	21	55	28	3	D 942
Press. Drop @ 100 hr, kPa	103	103	96	41	103	69	34	D 942
Press. Drop @ 500 hr, kPa								
Mean Hertz Load, kg	37	33	60	-	-	45	60	D 2596
Base Oil Type	Mineral	Mineral	Synthetic	Mineral	Synthetic	Synthetic	Synthetic	Spec
Oil Viscosity @ 98.9 °C	31.8	5.5	3.1	3.1	3.1	5.8	3.4	D 445

[Visit](#) your nearest Shell Associate or Reseller for more details.

Need more product information? Please the [Shell Helps Centre Technical Desk](#) at 1-800-661-1600 or e-mail us at questions@shell.ca

MSDS requests? Please call 1(403)691-2615 or fax your request to 1(403)691-3321.

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