



AeroShell Grease 5

Mineral grease for aircraft

AeroShell Grease 5 is a high temperature grease composed of a mineral oil and clay thickener, possessing good load-carrying ability. It is inhibited against oxidation and corrosion and has excellent resistance to water. The useful operating temperature range is -18°C to $+149^{\circ}\text{C}$.

DESIGNED TO MEET CHALLENGES

Main Applications

- AeroShell Grease 5 is particularly effective for use as a wheel bearing grease, especially when landing speeds are high, and is suitable for the lubrication of aircraft and engine accessories operating at high speeds and at relatively high temperatures, e.g. magnetos, generators and starters. For the lubrication of rolling bearings which are required to start at temperatures as low as -18°C an adequate period should be allowed for the grease to channel.

Specifications, Approvals & Recommendations

- MIL-G-3545C (obsolete)
- DTD.878A (obsolete)
- DCSEA 359/A (equivalent)
- NATO Code G-359 (obsolete)
- Joint Service Designation XG-277 (obsolete)

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties	Method	MIL-G-3545C	Typical
Oil type		-	Mineral
Thickener type		-	Clay
Colour	Appearance	-	Amber
Base Oil Viscosity	@40°C mm ² /s	ASTM D445	500 to 525
Base Oil Viscosity	@100°C mm ² /s	ASTM D445	32
Useful operating temperature range	°C	-	-18 to +149
Drop point	°C	ASTM D2265	177 min
Worked penetration	@25°C	ASTM D217	250 to 300
Oxidation Stability	100h @ 99°C psi	ASTM D942	10 max
Oxidation Stability	500h @ 99°C psi	ASTM D942	25 max
Oil separation 30 hrs	@100°C %m	ASTM D6184	5 max
Water Washout	@41°C %m	ASTM D1264	20 max
Low Temperature Torque - Start	@-17.8°C Nm	ASTM D1478	1.471 max (15000 g-cm)
Low Temperature Torque - Run	@-17.8°C Nm	ASTM D1478	0.4903 max (5000 g-cm)
Copper Corrosion	24h @ 100°C	FED-STD-791-5309	Must pass
Particle Count	part/ml	FED-STD-791 M.3005	Must pass
Rust Test		ASTM D1743	Must pass

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

- **Health and Safety**

This product is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from <https://www.epc.shell.com>

- **Protect the Environment**

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **Advice**

Advice on applications not covered here may be obtained from your Shell representative.