



# AeroShell Grease 14

## Mineral Grease for Aircraft

AeroShell Grease 14 is a helicopter multi-purpose grease composed of a mineral oil thickened with a calcium soap, possessing outstanding anti-fret and anti-moisture corrosion properties. It is oxidation and corrosion inhibited.

The useful operating temperature range is  $-54^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$ .

### DESIGNED TO MEET CHALLENGES

#### Main Applications

- AeroShell Grease 14 is the leading helicopter multi-purpose grease and is approved by all helicopter manufacturers. Owing to its anti-fret properties, AeroShell Grease 14 is particularly suitable for the lubrication of helicopter main and tail rotor bearings, splines, etc.

#### Specifications, Approvals & Recommendations

- MIL-G-25537C
- DEF STAN 91-51
- NATO Code G-366
- Joint Service Designation XG-284

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

#### Typical Physical Characteristics

Properties	Method	MIL-G-25537C	Typical
Oil type		-	Mineral
Thickener type		-	Calcium soap
Colour	Appearance	-	Tan
Base Oil Viscosity @40°C mm <sup>2</sup> /s	ASTM D445	-	13.7
Base Oil Viscosity @100°C mm <sup>2</sup> /s	ASTM D445	-	3.1
Useful operating temperature range °C		-	-54 to +75
Drop point °C	ASTM D2265	140 min	148
Worked penetration @25°C	ASTM D217	265 to 305	284
Penetration unworked @25°C	ASTM D217	200 min	277
Oxidation Stability 100h @ 99°C kPa	ASTM D942	34.5 max	20
Oxidation Stability 400h @ 99°C kPa	ASTM D942	137.8 max	93
Oil separation 30 hrs @100°C %m	ASTM D6184	5.0 max	4.0
Water stability Penetration delta worked 100,000 strokes + 10% water 0.1mm	FED-STD-791-313	70 max	44
Evaporation Loss 22h @ 100°C %m	ASTM D972	9.5 max	6.6
Low Temperature Torque - Start @-55°C Nm	ASTM D1478	1.47 max	0.53
Low Temperature Torque - Run @-55°C Nm	ASTM D1478	0.196 max	0.03
Copper Corrosion 24h @ 100°C	ASTM D4048	Must pass	Passes

Properties		Method	MIL-G-25537C	Typical
Particle Count	part/ml	FED-STD-791 M.3005	Must pass	Passes

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.