Technical Data Sheet

AeroShell **Grease 7**

AeroShell Grease 7 is an advanced multi-purpose grease, composed of a synthetic oil thickened with Microgel®, possessing good load carrying ability over a wide temperature range. It is inhibited against corrosion and has excellent resistance to water.

The useful operating temperature range is –73°C to +149°C.

DESIGNED TO MEET CHALLENGES

Main Applications

- AeroShell Grease 7 satisfies nearly all the airframe grease requirements of turbine engined aircraft and also those of piston engined aircraft provided that seal incompatibility does not occur. Most civil aircraft manufacturers approve AeroShell Grease 7 as a general purpose grease either by brand name or by specification. It is recommended for lubricating highly loaded gears, actuator screw mechanisms, etc., also for instrument and general airframe lubrication within the temperature range of –73°C to +149°C.

Specifications, Approvals & Recommendations

- U.S. : Approved MIL - PRF-23827C (Type II)
- French : Equivalent DCSEA 354/A

  For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk, or the OEM Approvals website.

Compatibility & Miscibility

- AeroShell Grease 7 contains a synthetic ester oil and should not be used in contact with incompatible seal materials.
- AeroShell Grease 7 is a clay-based grease approved to MIL-PRF-23827C Type II; it should not be mixed with soap-based greases approved to MILPRF-23827C Type I.

Typical Physical Characteristics

Properties			MIL-PRF-23827C Type II	Typical
Oil type			Synthetic	Synthetic ester (Diester)
Thickener type			Clay	Microgel
Base Oil viscosity	@-40°C	mm²/s	-	1150
Base Oil viscosity	@40°C	mm²/s	-	10.3
Base Oil viscosity	@100°C	mm²/s	-	3.1
Useful operating temperature range		°C	-	-73 to +149
Drop point		°C	165 min	260+
Worked penetration	@25°C		270 to 310	296
Unworked penetration	@25°C		200 min	283
Bomb Oxidation pressure drop 100 hrs	@99°C	kPa	70 max	62
Bomb Oxidation pressure drop 500 hrs	@99°C	kPa	105 max	96.5
Oil separation 30 hrs	@100°C	% m	5 max	3
Water resistance test loss	@38°C	% m	20 max	0.8
Evaporation loss 22 hrs	@100°C	% m	2.0 max	0.5
Mean Hertz Load		kg	30 min	60
Copper corrosion 24 hrs	@100°C		Must pass	Passes
Bearing protection 2 days	@52°C		Must pass	Passes
Anti-friction bearing performance	@121°C	hrs	-	2460
Colour			-	Buff

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**

  Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from http://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.