Technical Data Sheet

AeroShell **Grease *58***

AeroShell Grease 58 is an advanced general purpose and wheel bearing grease composed of a synthetic base fluid and a lithium complex soap thickener. AeroShell Grease 58 possesses outstanding combination high performance characteristics including high load carrying, corrosion protection, mechanical stability, oxidation resistance and wear resistance.

The useful operating temperature range is -54°C to +175°C

DESIGNED TO MEET CHALLENGES

Main Applications

AeroShell Grease 58 has been developed to exceed the requirements of the SAE AMS 3058 Wide Temperature Range Lithium Complex Aircraft Wheel Bearing Grease specification. It is recommended for use wherever severe operating conditions are encountered as in high bearing loads, high speeds, wide operating temperature range, and particularly where long grease retention and high resistance to water washout and corrosive fluids are required. AeroShell Grease 58 is the latest member of the AeroShell Lithium Complex Grease portfolio which includes AeroShell Greases 33 and 64.

The wide range of applications include aircraft wheel bearings, engine accessories, control systems, actuators, screw-jacks, servo mechanisms and electric motors, helicopter rotor bearings, instruments, airframe lubrication, hinge pins, static joints, landing gears.

Specifications, Approvals & Recommendations

- SAE AEROSPACE – approved to AMS3058
- AIRBUS – approved to AIMS 09-06-003

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

Typical Physical Characteristics

Properties			Method	SAE AMS 3058	Typical
Oil type				Synthetic Hydrocarbon / Ester	Synthetic Hydrocarbon
Thickener type				Lithium / Lithium Complex	Lithium Complex
Base Oil viscosity	@100°C	mm^2/s	ASTM D445	Report	12
Base Oil viscosity	@40°C	mm^2/s	ASTM D445	165 maximum	100
Useful operating temperature range		°C		-54 to +175	-54 to +175
Drop point		°C	IP 396	250 minimum	265
Worked penetration	@25°C	dmm	ASTM D217	265 to 305	295
Bomb Oxidation pressure drop 100 hrs	@99°C	kPa	ASTM D942	35 maximum	15
Bomb Oxidation pressure drop 500 hrs	@99°C	kPa	ASTM D942	105 maximum	40
Oil separation 30 hrs	@175°C	% m	ASTM D6184	8 maximum	4
Copper corrosion 24 hrs	@100°C		ASTM D4048	1b maximum	1b
Evaporation loss 22 hrs	@175°C	% m	ASTM D2595	10 maximum	4.9
Water Washout	@79°C	% m	ASTM D1264	15 maximum	5
Dynamic Rust Prevention 3% NaCl 7 days	@25°C		ASTM D6138	1/1 maximum	0/0
Extreme Pressure Weld Load		kg	ASTM D2596	315 minimum	350
Colour			Visual	-	yellow

Properties			Method	SAE AMS 3058	Typical
Low Temperature Torque Dry - Starting	@-54°C	N.m	ASTM D1478	2.0 maximum	0.7
Low Temperature Torque Dry - Running	@-54°C	N.m	ASTM D1478	0.5 maximum	0.15
Roll Stability 10% Water		1/10 mm	ASTM D1831	-20 to + 50	0

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.