



Shell Aviation

# AEROSHELL GREASE 58

Our innovative response to the need to enhance wheel-bearing protection in your current and future aircraft fleets

- Enhanced corrosion protection<sup>1</sup>
- Excellent anti-wear and load-carrying properties<sup>1</sup>
- Exceeds the SAE AMS 3058 specification



## Benefits at a glance

- ✓ Longer component life through better wear and corrosion protection<sup>1</sup>
- ✓ Reduced costs through prolonged bearing life<sup>1</sup>
- ✓ Longer grease life through superior dry and wet mechanical stability<sup>1</sup>
- ✓ Easier maintenance with the same grease technology available across the aircraft<sup>1</sup>
- ✓ Peace of mind from a dedicated wheelbearing grease based on proven AeroShell Grease 33 thickener technology

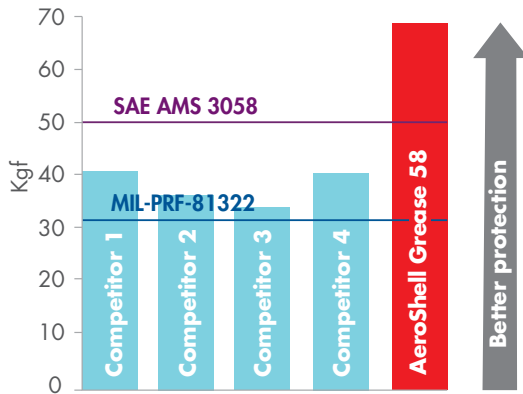


## Superior corrosion control

	AeroShell Grease 58	Competitor A	Competitor B	Competitor C
<b>3% salt solution</b> (EMCOR test <sup>2</sup> required to meet the AMS 3058 specification)	 NO VISIBLE CORROSION	 >10% CORROSION (FAILS TO MEET THE SAE AMS 3058 SPECIFICATION)	 1-5% CORROSION (FAILS TO MEET THE SAE AMS 3058 SPECIFICATION)	
<b>De-icer 1</b>	 NO VISIBLE CORROSION	 UP TO 1% CORROSION	 NO VISIBLE CORROSION	 NO VISIBLE CORROSION
<b>De-icer 2</b>	 NO VISIBLE CORROSION	 1-5% CORROSION	 UP TO 1% CORROSION	 5-10% CORROSION

**Meeting the specifications where others fail:** AeroShell Grease 58 exceeds SAE AMS 3058 corrosion requirements. Not all the popular, lithium-complex wheel-bearing greases meet these specifications or protect against the effects of the latest runway de-icing fluids. Two other greases that were tested failed: a popular red lithium-complex grease received the worst possible rating. AeroShell Grease 58 is also better than or equals competitors' products in EMCOR tests with corrosive runway de-icing fluids, thereby offering the best overall corrosion protection.

## Performance under extreme pressure



**A step change in extreme-pressure protection.** AeroShell Grease 58 has **better load wear protection** compared with MIL-PRF-81322 greases in ASTM D2596 tests.

“ AeroShell Grease 58 shows **superior antiwear performances** compared with the red lithium-complex grease that Austrian Airlines normally uses. All the bearings look in better condition and **show less wear**”.

ROMAN VALENTIN, COMPONENT ENGINEERING,  
AUSTRIAN AIRLINES

Austrian 

## Benefits you can see<sup>3</sup>



AeroShell Grease 58, which meets the SAE AMS 3058 specification, after 548 cycles:

- remains in contact with the bearing rollers and the track
- provides better sealing against external contamination.



The red lithium-complex grease that Austrian Airlines normally uses, which does not meet the SAE AMS 3058 specification, after 548 cycles shows:

- signs of oil separation
- greater ingress of contaminants.

## Specifications and approvals

AeroShell Grease 58 exceeds the requirements of

- SAE AMS 3058
- Airbus AIMS 09-06-003.

## A comprehensive range

Whatever type of aircraft you fly, we can provide a full range of AeroShell oils, greases and fluids for your aircraft, including

- AeroShell Turbine Oil 560 for proven performance in engines and APUs
- AeroShell Turbine Oil 2 for fuel system preservation
- AeroShell Fluid 41 “superclean”, mineral hydraulic oil
- AeroShell Grease 33 and AeroShell Grease 64.

## CONTACT US

For further information, please contact your AeroShell representative:

[www.aeroshell.com](http://www.aeroshell.com)

<sup>1</sup>Compared with MIL-PRF-81322 specification greases

<sup>2</sup>Industry standard EMCOR dynamic rust-prevention tests expose grease-lubricated moving bearings to water/sodium chloride solution for one week at room temperature with the bearings being partially immersed in the water/solution. The bearing rings are then examined for corrosion. The results are expressed from 0 to 5, with 0 showing no corrosion and 5 showing up to 10% of the inside surface of the bearing ring being corroded. Tests conducted by Shell scientists.

<sup>3</sup>Austrian Airlines evaluated AeroShell Grease 58 in Airbus A319 and A320 aircraft using Safran Landing Systems main landing gear and UTAS nose landing gear with Timken bearings. AeroShell Grease 58 and the red lithium-complex grease normally used by the airline were packed in paired wheels to enable comparison and evaluated over 14,522 landing cycles.