



FAQ – Change of AeroShell Grease Shelf Life

Q. How do we currently measure the expiry date of AeroShell Grease?

A. The current measurement for the expiry date of AeroShell product is by using the term ‘retest period’. The retest period of AeroShell Grease is set at 3 years. This means that a retest of the product is required 3 years after the date of manufacture.

Q. How did the term ‘retest period’ come about?

A. The term ‘retest period’ arises from military applications. Products stored in military bases may undergo high level of stress such as thermal cycling, hence the requirement to have processes such as retesting to ensure the quality of the product. Consequently, Shell adopted these recommendations and they are based on NATO AFLP (Allied Fuels and Lubricants Publication) 4714 which is the NATO standard for “Minimum Quality Surveillance for Lubricants and Associated Products”.

Q. What is the recommendation found in NATO AFLP 4714?

A. NATO recommends that all lubricants do not have an indefinite shelf life and that products should not be used after 72 months. There are also recommended retest intervals. For greases, the 1st retest date is at 36 months and subsequent retest shall follow at half of the 1st interval.

As an example, in following the recommendation, a grease is required to carry out a 1st retest at 36 months, and upon passing the retest, it can be used for another 18 months before a 2nd retest is required at 54 months. Upon passing the 2nd retest, the grease can be used up to 72 months. Products should not be used after 72 months.

These requirements must be considered due to the possibility of lubricants being subjected to high thermal cycling and outdoor storage conditions for some military bases.

Q. Is there a shelf life recommendation in the other specifications that AeroShell Greases are approved to?

A. No. Standards such as Airbus Industries Material Specification (AIMS), Boeing Material Specification (BMS), Mil-Spec or SAE Aerospace Material Specification (SAE AMS) set limits for the physical, chemical and performance requirements of the product but do not set the recommended shelf life.

Q. What is the change for the shelf life of AeroShell Grease?

A. Moving forward, Shell is adopting the term ‘shelf life’ to be more aligned with the technical jargon commonly used in the commercial and general aviation industry. The shelf life of AeroShell Grease has been changed to 6 years.

Q. What are the terms and conditions for this increased shelf life?

A. For the use of grease in the commercial and general aviation industry, products should be well-kept in a proper indoor warehouse storage. As such, Shell has included a cautionary note that the shelf life of grease can be 72 months provided the product is unopened, undamaged and stored under shelter at constant ambient temperature condition. A retest is also recommended 36 months after date of manufacture.

Q. Why are the cautionary notes included?

A. If stored properly, AeroShell products are inherently stable. However, improper storage can affect the properties of the product. If the product does not meet the condition of being unopened, undamaged and stored under shelter at constant ambient temperature condition, Shell recommends retesting the product 36 months after date of manufacture as a precautionary measure.

Q. What is the recommended storage for AeroShell Grease?

A. Products shall not be stored outdoors. For products kept in indoor warehouses, AeroShell Grease should be kept away from strong sunlight entering through windows and open doors. Accordingly, the containers should be kept in shaded condition and within a constant ambient temperature range to prevent thermal cycling. An ambient temperature of 0°C to 40°C (32°F to 104°F) is considered acceptable. Prolonged exposure of the product outside the ambient temperature is not recommended.

Q. Where are the revised changes found on Shell products?

A. The revised changes will be made to the Certificate of Analysis (COA). This is the certificate which is accompanied with each batch of AeroShell Grease that is produced. Currently the packaging labels on the product do not indicate the shelf life of the product. Hence there will be no change to the packaging labels unless there is a mandatory requirement in some countries to include a shelf life statement.

Q. How do we determine the new shelf life of the product?

A. The COA has the date of manufacture or the date of test for each batch of AeroShell Grease that is produced. Add 6 years to the later date to determine the shelf life of AeroShell Grease.

Q. What should I do if I have stock of AeroShell Grease that is approaching 3 years?

A. COA for previous production batches of AeroShell Greases cannot be re-issued. For current products in the market, the revised shelf life of 6 years can be applied to existing batches of AeroShell Grease, provided they have been unopened, undamaged and stored under shelter at constant ambient temperature condition.

Q. Why are some competitors able to have a longer shelf life than AeroShell Grease?

A. While most specifications that AeroShell Grease are approved to do not give a recommendation for shelf life, Shell has followed NATO's recommendations on shelf life from the onset. NATO AFLP (Allied Fuels and Lubricants Publication) 4714 which is the NATO standard for "Minimum Quality Surveillance for Lubricants and Associated Products" recommends that lubricants do not have an indefinite shelf life and after 72 months, lubricants are no longer authorised for NATO servicing. Most of AeroShell Greases are assigned a NATO code number. For example, the NATO Code Number for AeroShell Grease 33 is G-354 and the NATO Code Number for AeroShell Grease 22 is G-395. This is the approach that we are using for setting AeroShell Grease with a shelf life of 6 years. Greases with similar NATO Code Number going beyond the 6 year shelf life are not strictly adhering and complying to the recommendation of NATO.

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