

ORDERING INFORMATION GREASE



Aerial ThixOSYN Aviation Grease (C-172*)

Developed with the assistance of Bell Helicopter, Aerial ThixOSYN Aviation Grease is approved for specific applications as an alternative to traditional greases (C-001) on a range of models.

Additionally, there are many other areas where Aerial ThixOSYN has been used to improve component life, and to preserve the integrity of yokes, splines and other components which in turn reduce long term maintenance and repair costs.

Some of the key advantages for using Aerial ThixOSYN, are related to its long term stability, wide operating temperature range and powerful EP/AW chemistry. When compared to the leading aviation greases used by helicopters, Aerial ThixOSYN is more stable in long term use, prevents damage in humid and wet environments and has a tenacious ability to remain in bearings under a wide range of stresses and conditions.

Aerial ThixOSYN is versatile, effective and proving itself to be superior to other greases in numerous applications.

400g Tube
3820-3
(Case of 30)

17 kg
3821-0

55 kg Keg
3822-0

180 kg Drum
3823-0



Aviation Thixo EP2 Grease (C-561)

Aviation Thixo EP2 Grease replaces corrosion preventative compounds (CPC's) in many areas on rotor hub assemblies and is used on swashplate drive hub sets, splines and mast poles on various models as directed by the OEM.

Aviation Thixo EP2 Grease is also approved and recommended for use in a wide range of Bell Helicopter models for specific applications - primarily to prevent rust, corrosion and seizing of critical components and provide long life protection.

When using Aviation Thixo EP2 Grease, it is important to note that it is NOT considered an alternate for other greases in all applications. Be sure to carefully read and apply all instructions found in the maintenance manuals and technical service bulletins published by the OEM.

425g Tube
3810-3
(Case of 30)

17 kg
3811-0

55 kg Keg
3812-0

180 kg Drum
3813-0

NOTICE: ALWAYS FOLLOW APPLICATION DIRECTIONS AS OUTLINED BY OEM.

FOR BELL HELICOPTER MODELS

Each grease (C-172, C-561 and C-001) have their own properties and their use must be in accordance with Bell Helicopter's requirements. Any deviation from the related Chapter 12 approved greases should not be made without the expressed agreement of Bell Helicopter. Please contact Bell Helicopter Product Support Engineering or AwSUM Outcomes Technical Services if you have specific application inquiries.

FOR OTHER MANUFACTURERS

The use of Aerial ThixOSYN Aviation grease and Aviation Thixo EP2 Grease has been reviewed by other helicopter manufacturers for additional applications. Consult with the Product Support Engineering departments of your manufacturer prior to using these products on your models. AwSUM Outcomes Technical Services can also assist with obtaining approvals for other manufacturers.

C-172*
BELL SPEC 299-947-554
MIL-PRF-24139

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Toll Free: +1-844-512-4093
www.awsumoutcomes.com

or contact your authorized OEM Helicopter Supply Center

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HIGH PERFORMANCE

Grease Solutions



Aerial **ThixOSYN**
Aviation

Aviation
THIXO EP2 GREASE

Aeriol ThixOSYN Aviation Grease and Aviation Thixo EP2 Grease have been engineered with the unique properties of an advanced thickening agent, high viscosity index quality base oils and advanced lubricant chemistry.

These greases are compatible with many grease types, have broad operating temperature ranges, high shear stability and exceptionally low oil separation. They do not bleed or age harden under normal operating conditions, are highly resistant to

shock loading and up to 20X more resistant to water washout when compared to competitive greases.

Aeriol ThixOSYN meets or exceeds the MIL PRF 24139 specification for multipurpose, water resistant grease and provides improved performance vs traditional aviation grease formulas.

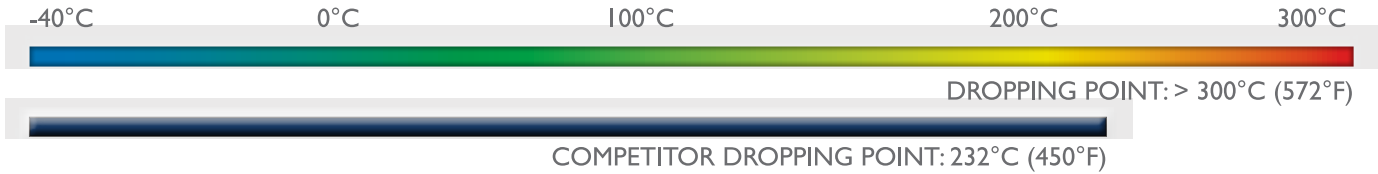
When selecting a grease, always consult the maintenance requirements set forth by the OEM.

The technical data for Aviation Thixo EP2 and ThixOSYN is available for download from our website.

The data shown in the following charts relates to Aeriol ThixOSYN Aviation Grease.

OPERATING RANGE

High dropping points combined with excellent results on the low temperature torque test demonstrates that the grease remains functional in a wide range of temperature extremes.



RUST & CORROSION PREVENTION

ASTM D1743
Greased bearings are exposed to water for 48 hrs. To pass, there should be no visible corrosion spots greater than 1 mm in diameter.

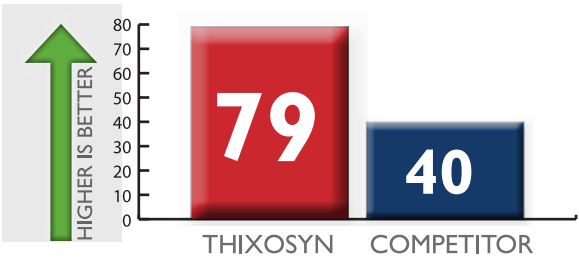


ASTM D1743
Coated metal surfaces are sprayed with a saltwater fog over the duration of the test.

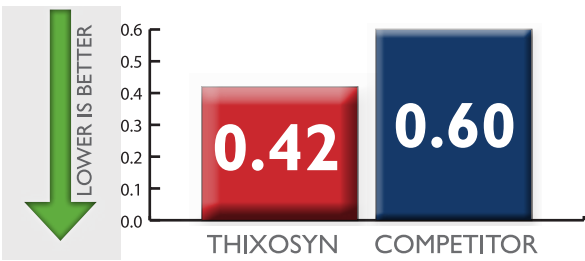
>300 hrs

EXTREME PRESSURE & WEAR PROTECTION

LOAD WEAR INDEX
A measurement of the kgf relative to the applied loads preceding the weld point of the 4 ball wear test. MIL PRF 81322 requires a minimum LWI of 30.

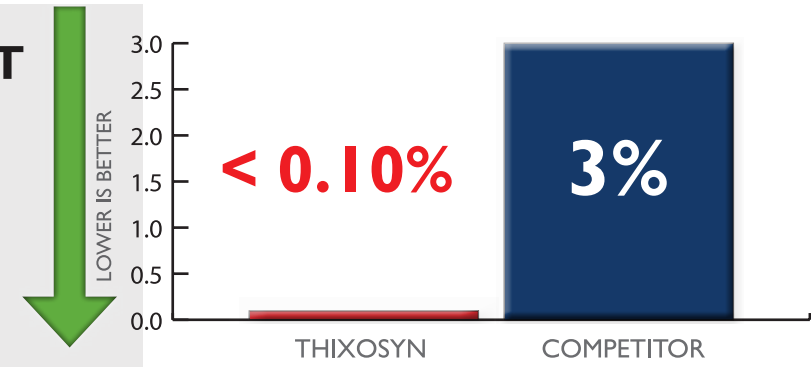


WEAR SCAR SIZE
An average of the wear scar dimensions (measured in mm) on the 4 balls used in the ASTM D2266 test.

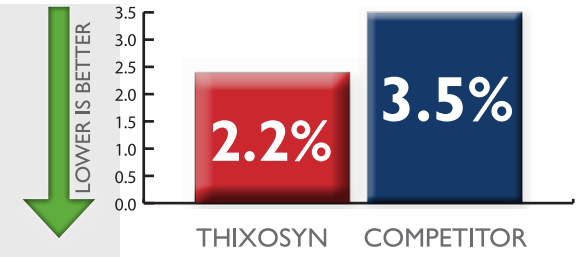


STABILITY UP TO 20X MORE RESISTANT TO WATER WASHOUT

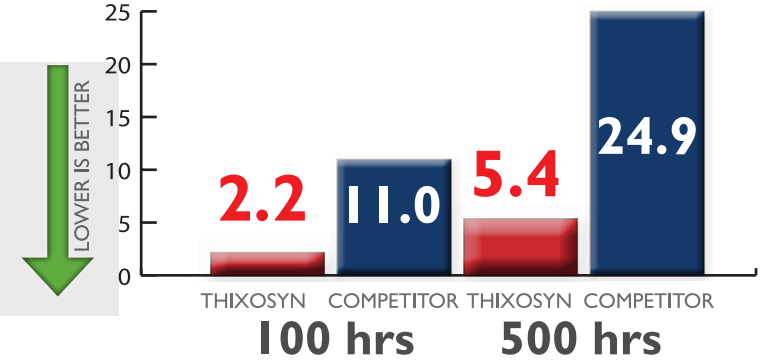
WATER WASHOUT RESISTANCE
Measured as a percentage of how easily grease washes out under direct water contact, this can be an indicator of how the grease will perform in wet and humid environments. This test is performed by running water for 1 hour over a ball bearing apparatus in a controlled stream. Grease that is washed away is measured by weight.



CHANGE IN WORKED PENETRATION
Mechanical stability requires the grease to remain close to the same consistency in all working conditions. A lower change in the result of ASTM D217 over an extended duration of the test (from 60 strokes to 10 000 strokes or higher) demonstrates that a grease maintains its consistency better over time.



BOMB OXIDATION
Grease is placed within the ASTM D942 testing apparatus (oxidation bomb), filled with oxygen and charged to 100 psi. The test is run to 100 and 500 hrs with the pressure drop in psi reported. MIL PRF 81322 limits the maximum psi drop to 12.0 at 100 hrs and 24.0 at 500 hrs. The lower the result, the better the grease resists breakdown because of oxidation.



COMPATIBILITY

Thickening Agent	ThixOSYN	Thixo EP2
Calcium Sulphonate	✓	✓
Aluminum Complex	✗	✗
Barium	✗	✗
Anhydrous Calcium	✓	✓
Calcium Complex	✓	✓
Clay	✗	✗
Lithium	✓	✓
Lithium Complex	✓	✓
Polyurea	✗	✗
Sodium	✗	✗
Microgel	✗	✗

✓ FULLY COMPATIBLE ✗ NOT COMPATIBLE

Although Aeriol aviation greases have been tested for compatibility, they may not always be used as an alternative. Always refer to the Technical Bulletins or Maintenance Manuals prior to making a substitution. This chart is a guideline only and we recommend specific compatibility testing be performed as per the application.

Special care should always be taken if purging bearings designed to be purged by the seals; progressive introduction of the grease while rotating the bearing will protect their integrity.

Scan here to learn more.

