



GREASE, FLUORINATED LUBRICANT, AEROSOL CANNISTER GREASE, FLUORINATED LUBRICANT, BRUSH APPLICATOR

WSS-M1C282-A1
WSS-M1C282-A2

1. SCOPE

WSS-M1C282-A1 The material defined by this specification is a perfluoropolyether (PFPE) oil with a gaseous fluorinated propellant used to apply the lubricant as an aerosol spray.

WSS-M1C282-A2 The material defined by this specification is a perfluoropolyether (PFPE) oil, with a brush applicator to apply the lubricant.

2. APPLICATION

This specification was released originally for anti-squeak purposes for body interior. The aerosol spray produces a PFPE oil film on the surface which can feel oily to the touch. The lubricant is suitable for operating temperatures between - 36 and + 204 °C.

3. REQUIREMENTS

3.1 APPROVED SOURCES

This specification requires the use of approved sources. Only the sources identified on the Ford Approved Source List (ASL) can be used when this specification is listed on the drawing, CAD file, or other documents. The list of approved sources is located within Ford at www.mats.ford.com or available externally through a Ford Materials Engineer.

3.2 CANNISTER WEIGHT at 20 °C

3.2.1	Aerosol	125g Minimum
3.2.2	Brush Applicator	14 g Minimum

3.3 BASE OIL COLOR (Visual)

Clear/Transparent

3.4 BASE OIL Density at 20 °C

1.91 g/ml

3.5 BASE OIL Viscosity at 40 °C (ASTM D445)

150 – 170 mm²/s

4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification. Contact gmfs@ford.com for questions concerning Engineering Material Specifications. Grease approved to this specification should have the following typical properties.

4.1 BASE OIL Viscosity Index (ASTM D2270)

124

4.2 BASE FLUORINATED POLYMER (According to formulation, ASTM D128)

3 – 8%

Date	Action	Revisions	Rev. 01
2017 05 08	Released	A2	
2015 05 26	Released	A1	



4.3 DROPPING POINT Not Available
(ASTM D556, ASTM D2265, DIN ISO 2176)
The test gives inaccurate results on solid thickened greases and would show a drop of oil from the cup at temperatures under 200 °C even for greases that work at higher temperatures.

4.4 BASE OIL Density at 100 °C 1.76 g/ml

4.5 BASE OIL Viscosity at 100 °C 16 – 20 mm²/s
(ASTM D445)

4.6 INTERFACE COMPATIBILITY

4.6.1 Chemical Attack to Painted Surfaces
(FLTM BJ 126-01).

Note: Not tested for initial application of this grease. PFPE / PTFE lubricants are generally inert to painted surfaces. Grease must be tested for chemical attack to painted surfaces for applications that come in contact with paint surfaces, ex. E-coat and powder coat.

4.6.2 Resistance to Stress Cracking
(FLTM BO 127-03)

Note: Not tested for initial application of this grease. PFPE / PTFE lubricants are generally inert to plastics. Grease must be tested for resistance to stress cracking when used for additional applications that come in contact with polymers such as PC, ABS, PC+ABS, ASA or acrylic

4.6.3 Elastomer Compatibility, NBR
(ASTM D 4289, DIN 53505, DIN 53504, 70 hrs, 100 °C)

Note: Not tested for initial application of this grease. PFPE / PTFE lubricants are generally inert to rubber. Grease must be tested for elastomer compatibility when used for additional applications that come in contact with elastomers. Application specific elastomer should be used for testing instead of a reference elastomer.

4.7 APPROVAL OF MATERIALS

Suppliers desiring approval of their materials shall first obtain an expression of interest from Purchasing, Design or Product Development, and Materials Engineering. The supplier shall submit a completed copy of their laboratory test reports, signed by a qualified and authorized representative of the test facility, demonstrating full compliance with all the requirements of the Material Specification. Tested material samples must be available for review upon request and kept for a minimum of one year. Upon request, the supplier will review the associated quality control documents (Process Failure Mode and Effects Analysis, Control Plans, Certification testing) with Ford.

4.8 SUPPLIER'S ONGOING RESPONSIBILITY

All materials must be equivalent in all characteristics to the material upon which approval was originally granted.

Prior to making any changes to the material originally approved, whether or not such changes affect the material's ability to meet the specification requirements, the supplier shall notify the affected Supplier Technical Assistance (STA), Purchasing, and Materials Engineering activities of the proposed changes (with reasons) by submission of a completed Suppliers Request for Engineering Approval, SREA.