



LUBRICANT, SILICONE, PTFE/ADDITIVES

WSS-M1C263-A

1. SCOPE

The material defined by this specification is a synthetic lubricating compound consisting of a dimethyl polysiloxane fluid, PTFE, and other additives to provide low friction properties.

2. APPLICATION

This specification was released originally for a compound to be used on brake caliper pins where good rubber to metal or plastic to metal lubrication is required. The lubricant is suitable for operating temperatures between -40 and + 150 °C.

3. REQUIREMENTS

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials

3.2 COLOR

White

3.3 PENETRATION, tenths of a millimeter
(ASTM D 217, DIN ISO 2137, unworked)

265 - 315

3.4 BLEED

(MIL-S-791b, Method 321.2, 24 h at 150 °C)

2.0% max

3.5 EVAPORATION

(MIL-S-791b, Method 321.2, 24 h at 150 °C)

2.0% max

4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification. Grease approved to this specification should have the following typical properties.

4.1 DROPPING POINT
(ASTM D 566)

204 °C min

4.2 OXIDATION STABILITY
(ASTM D 942 or DIN 51808, pressure drop in 100 h)

15 kPa max

4.3 WATER SPRAY-OFF
(ASTM D 4049, 5 minutes at 38 °C)

1.0% max

4.4 CORROSION
(ASTM B 117, 1 mm thickness, 500 h)

10% max

4.5 DIELECTRIC CONSTANT
(ASTM D 150)

3.2

Date	Action	Revisions
2010 12 02	Revised	See Summary of Revisions C. Mracna, NA
2004 05 20	Revised	Para 3.0 inserted; para 3.1, 3.2, 3.3, 3.6 & 4 deleted
2000 01 06	Activated	

**4.6 LOW TEMPERATURE TORQUE**

(ASTM D 1478 or IP 186, -20 °C)

Starting 426 gfcmm max

Running 240 gfcmm max

4.7 OIL SEPARATION

(ASTM D 1742, DIN 51817, FTMS 791 C 321.3,)

1.0% max

4.8 INTERFACE COMPATIBILITY

Production representative materials specific to the application should be used for the following tests.

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

Note: Not tested for initial application of this grease. 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.

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

Note: Not tested for initial application of this grease. 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.

4.8.3 Elastomer Compatibility, EPDM
(ASTM D 471, 168 h at 75 °C)

Volume change 15%

Hardness change, Durometer A - 8

5. SUMMARY OF REVISIONS**2010 12 02**

- Lot certification tests moved to requirements.
- Added information on interface compatibility which are requirements in WSS-M13P13-A.