



GREASE, SILICON, NLGI GRADE 3

WSS-M1C222-A1

1. SCOPE

The material defined by this specification is a NLGI grade 3 grease consisting of silicone oil with polytetrafluoroethylene (PTFE) thickener.

2. APPLICATION

This specification was released originally for grease used to lubricate microcellular urethane (MCU) jounce bumpers on shock absorbers to prevent noise.

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 (WSS-M99P1111-A).

3.2 COLOR (Visual)

White - Cream

3.3 WORKED PENETRATION, tenths of a millimeter (ASTM D217, DIN ISO 2137, 60 strokes)

220 - 250

3.4 WATER RESISTANCE (EVALUATION GRADE) (DIN 51807-1, ASTM D1264)

1 at 90 °C

3.5 OIL SEPARATION DURING STORAGE (ASTM D1742, DIN 51817, 18h/90°C)

≤ 1.5%

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.

4.1 BASE OIL PROPERTIES

4.1.1 Kinematic Viscosity (DIN 51562)

Viscosity at 100°C

Approx. 1200 mm²/s

Viscosity at 40°C

Approx. 3100 mm²/s

4.2 APPROVED SOURCE

4.2.1 Carl Bechem, Berulub Sihaf 2

Date	Action	Revisions	Rev. 0
2015 04 05	Released		



Documents

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4.2 INTERFACE COMPATIBILITY

4.2.1 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. Ecoat and powder coat.

4.2.2 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

4.2.3 Elastomer Compatibility (ASTM D4289, 70 h, 100 °C, DIN 53505, DIN 53504)

Note: Not tested for initial application of this grease. Successfully used on microcellular polyurethane jounce bumpers on several vehicle lines. 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.

Determine change in volume, hardness change tensile strength and elongation.

5. SUMMARY OF REVISIONS