



GREASE, POLYUREA, NLGI 2, DOOR CHECK ARM

WSS-M1C238-B

1. SCOPE

The material defined by this specification is a grease consisting of mineral oil, polyurea thickener and other additives to give the desired characteristics.

2. APPLICATION

This specification was released originally for grease used to lubricate and provide corrosion resistance for door check arm assemblies.

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 Light Brown
(Visual)

3.3 WORKED PENETRATION, tenths of a millimeter 290 - 320
(ASTM D 217, DIN ISO 2137, 60 strokes)

3.4 DROPPING POINT 240 °C min
(ASTM D 566 or ASTM D 2265, DIN ISO 2176)

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 POLYUREA THICKENER 14% min
(ASTM D 128)

4.2 MINERAL OIL 75% min
(ASTM D 128)

4.3 MINERAL OIL

4.3.1 Viscosity At 40 °C 490 mm²/sec min
(ASTM D 445, DIN 51562)

4.3.2 Viscosity At 100 °C 32 mm²/sec min
(ASTM D 445, DIN 51562)

Date	Action	Revisions
2010 07 30	Revised	See Summary of revisions paragraph 5 L. Schmalz, NA
2004 04 21	Revised	Para 3.0 inserted, para 3.1, 3.2, 3.3, 3.6 & 4 deleted
2000 09 05	Activated	Replaces WSD-M1C238-A

**4.4 EMCOR CORROSION**

(ASTM D 6138, DIN 51802, 168 hrs)

Distilled water	0/0
3% sodium chloride	0/0
5% sodium chloride	1/1

4.5 WATER WASHOUT

(ASTM D 1264, DIN 51807 T02 at 38 °C)

10% max

4.6 OIL SEPARATION

(ASTM D 1742 or Federal Standard 791C, Method 321.3, DIN 51817)

10% max

4.7 FOUR BALL WELD LOAD

(ASTM D 2596, DIN 51350 T 4)

245 kgf

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)	No staining or softening of automotive finishes
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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 (ASTM D 4289, 70 h, 100 C, DIN 53505, DIN 53504)

Volume change
Hardness change, max
Tensile Strength change

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

5. SUMMARY OF REVISIONS**2010 07 10**

Added Color, Penetration, and Dropping point to Requirements.

Added the following to General Information:

Thickener range, Mineral oil %, Viscosity, Emcor Corrosion, Water washout, Oil separation, Four ball weld load, Interface compatibility