

**GREASE, ANTI-SHUDDER LUBRICATION,
HIGH TEMPERATURE RESISTANCE,
CONSTANT VELOCITY JOINT****WSS-M1C258-A1****1. SCOPE**

The material defined by this specification is a lubricating grease consisting of a uniform blend of refined mineral oils, polyurea thickener, and antiwear/extreme pressure additives. Provides improved friction coefficient to reduce shudder tendency.

2. APPLICATION

This specification was released originally for grease used for automotive components as a long life, high temperature lubricant, and compatible with silicone rubber for constant velocity joints.

3. REQUIREMENTS**3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS**

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.4 COLOR Blue - Green

3.5 POLYUREA THICKENER 9 - 14%
(Calculated based on thickener raw materials in batch)

3.6 MINERAL OIL VISCOSITY AT 100 °C, Min 10.26 - 13.5
(ASTM D 445) mm²/s (cSt)

3.7 MINERAL OIL VISCOSITY AT 40 °C, Min 95.9 - 124
(ASTM D 445) mm²/s (cSt)

3.8 VISCOSITY INDEX, Min 85
(ASTM D 2270)

3.9 DROPPING POINT
(ASTM D 2265)

3.9.1 As Received, Min 250 °C

3.9.2 After Aging 100 h at 150 °C, Min 220 °C

Date	Action	Revisions
2004 04 28	Revised	Para 3.0 inserted; para 3.1, 3.2, 3.3, 3.18 & 4 deleted
1999 12 23	Revised	Rev Para 1, 3.3, 3.6, 3.7, 3.14, & 3.16
1999 08 24	Activated	

**3.10 CONSISTENCY STABILITY**
(ASTM D 217)

3.10.1	60 Strokes Worked (6.4 mm diameter hole)	290 - 330
3.10.2	1 x 10 ⁵ Strokes Worked, Max. (6.4 mm diameter hole)	50% increase over 60 stroke value

3.11 OXIDATION STABILITY
(ASTM D 942)

3.11.1	Pressure Drop in 500 h, Max	135 kPa
3.11.2	Total Acid Number, Max (From Samples in 3.11.1)	1.2

3.12 Water Content, Max
(ASTM D 95)

0.2%

3.13 OIL SEPARATION, Max
(ASTM D 1742 modified to measure
mL after 96 h)

5.0 mL

3.14 FOUR-BALL WEAR TEST, SCAR DIA, Max
(ASTM D 2266)

75 °C	0.75 mm
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3.15 FOUR-BALL WELD TEST, WELD POINT, Kg, Min
(ASTM D 2596)

200

3.16 CORROSION, Max
(ASTM D 1743, original method)

3

3.17 ADDITIONAL REQUIREMENTS

Specific requirements for material and/or manufacturing parts shall be specified on the Engineering drawing. Engineering parts specification and/or performance specification. All critical areas with respect to these properties shall be clearly designated on the Engineering drawing.