



GREASE, PTFE, LIGHT CONSISTENCY

WSG-M1C218-B2

1. SCOPE

The material defined by this specification is a synthetic lubricating grease consisting of specifically formulated base oils and PTFE.

2. APPLICATION

This specification was released originally for grease used on ball bearings and drive components of starting motors. This lubricant is suitable for operating temperatures between - 40 and 232 °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 (WSS-M99P1111-A).

3.2 COLOR Olive Green
(Visual)

3.3 WORKED PENETRATION, tenths of a millimeter 260 - 320
(ISO 2137/ASTM D 217, 60 stroke)

3.4 DROPPING POINT 250 °C min
(ASTM D 566 or ASTM D 2265, DIN ISO 2176)

4. GENERAL INFORMATION

The information given below is typical property data fro the grease approved for this specification. Grease approved to this specification should have the following typical properties.

4.1 MINERAL OIL 20% min
HYDOGENATED POLYOLEFIN 40% min
(ASTM D 128)

4.2 PTFE THICKENER 3-4%
(ASTM D 128)

4.3 PROLONGED WORKED PENETRATION, +/- 15% max change
(ISO 2137/ASTM D217, 100,000 strokes) from 60 stroke result

4.4 EVAPORATION 6% max
(ASTM D972-02, 24H at 200°C)

4.5 OXIDATION STABILITY 69 kPa
(ASTM D 942 or DIN 51808, 100 hr at 99 °C)

Date	Action	Revisions
2010 07 30	Revised	See summary of revisions paragraph 5. L. Schmalz, NA
2004 04 27	Revised	Para 3.0 inserted; para 3.1, 3.2, 3.3, 3.6 & 4 deleted
1994 06 30	NGA1E10370437006	Released



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|------------|---|--------|
| 4.6 | CORROSION RESISTANCE
(ASTM D 1743) | Pass |
| 4.7 | WATER WASHOUT
(ASTM D 1264, at 38 °C, DIN 51807 T02) | 6% max |
| 4.8 | OIL SEPARATION
(ASTM D 1742 or Federal Standard
791C, Method 321.3, DIN 51817) | 5% max |
| 4.9 | INTERFACE COMPATIBILITY | |

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

- 4.9.1 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 when used for additional applications that come in contact with paint surfaces, ex. E-coat and powder coat.

- 4.9.2 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.

- 4.9.3 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 30

Deleted: Initial Qualification
Ongoing Verification Plan
Consistency
Functional Approval
Supplement A,B,C

Added Requirements: Color
Penetration
Dropping Point