



MAGNET, NONMETALLIC BINDER

ESF-M99G115-A

1. SCOPE

The material defined by this specification is a synthetic rubber bonded barium ferrite composite material.

2. APPLICATION

This specification was released originally for material used as a permanent magnet such as in the distributor.

3. REQUIREMENTS

Material specification requirements are to be used for initial qualification of materials.

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).

3.1 GENERAL

3.1.1 Specific Gravity, min (ASTM D 792) 3.5

3.1.2 Hardness, min (ASTM D 2240, Durometer "D", 10 seconds delay) 43

3.1.3 Ozone Resistance, max (ASTM D 1149) 0

Test Method: Sample size approximately 7 x 7 x 125 mm. Fix both ends in a clamping device and deflect the center 0.51 mm. Place in ozone chamber under this stress for 72 h.

3.1.4 Oil Resistance (ASTM D 471, 72 h at 102 °C in #3 oil)

Volume Change 0 - 8%

Date	Action	Revisions
2006 09 18	Revised	Inserted 3.0; Deleted 3.3, 3.4, 3.5, 3.6 & 4
1992 01 02	Revised	DF00E00107002102 Revised 3.1.2 & Updated
1967 11 16	Released	F6-3253 (Was XF-M99GX2)





3.1.5 Reversible Magnetic Temperature Coefficient, max

Loss: 34% of 23 +/- 2 °C reading.

Test Method: Determine Gauss of magnetized material at 23 +/- 2 °C. Raise temperature to 191 +/- 3 °C and read Gauss. This value should not be less than 66% of reading at 23 +/- 2 °C. Cool to 23 +/- 2 °C and read Gauss. It should be the same as the original reading.

3.2 PART REQUIREMENTS

3.2.1 Magnetic

Magnetic properties to be specified on engineering drawing.

3.2.2 Mechanical

Properties such as breaking strength, crushing strength, etc., to be specified on engineering drawing.

3.2.3 Surface Condition

No evidence of surface cracks, pitting or any other imperfections.

5. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification.

5.1 TYPICAL DEMAGNETIZATION CURVE

See Table on Page 3.