



ENCAPSULANT, SILICONE DIELECTRIC GEL

WSS-M99G128-B1

ENCAPSULANT, SILICONE DIELECTRIC GEL,
LOW TEMPERATURE RESISTANT

WSS-M99G128-B2

ENCAPSULANT, SILICONE DIELECTRIC TOUGH GEL

WSS-M99G128-B3

1. SCOPE

- B1 The material defined by this specification is a very soft, 2 part, silicone gel.
- B2 The material defined by this specification is a very soft, fast room temperature cure, 2 part, silicone gel, with a freezing point below -60 °C.
- B3 The material defined by this specification is a flexible, firm, 2 part, silicone gel.

2. APPLICATION

- B1 This specification was released originally for a compound used in sealing and potting diodes in the alternator rectifier circuit, with the exception of modules containing wire bonds.
- B2 This specification was released originally for a compound used in sealing and potting in the mass air flow sensor, with the exception of modules containing wire bonds.
- B3 This specification was released originally for a compound used in sealing and potting in the distributed battery module, with the exception of modules containing wire bonds.

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).

3.4 VISCOSITY - BROOKFIELD VISCOMETER, mm²/s

(ASTM D1084 Method "B", model LVT,
60 rpm, # 3 spindle for B1/B2, 30 rpm,
#2 spindle for B3)

		B1	B2	B3
3.4.1	Part A	200 - 700	300 - 700	200 - 700
3.4.2	Part B	200 - 700	300 - 700	200 - 700
3.4.2	Mixed	200 - 700	300 - 700	N/A

Date	Action	Revisions
2006 09 19	Revised	Inserted 3.0; Deleted 3.1, 3.2, 3.3, 3.12, 3.13 & 4
1999 08 23	Revised	Added -B3; Comp. Rev. & Updated
1995 08 14	Activated	

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ENGINEERING MATERIAL SPECIFICATION

WSS-M99G128-B1//B2/B3

		B1	B2	B3
3.5	GEL TIME, minutes (ASTM D 2471, components at R.T.)	5 - 15 at 135 °C	10 - 25 at 25 °C	5 - 15 at 22 °C
3.6	PENETRATION, mm (FLTM BJ 123-03, cured 1 h at 150 °C)	3 - 8	6.0 - 11.0	N/A
3.7	HARDNESS, DUROMETER, 00 (ASTM D 2240, cured 30 minutes at 150 °C)	N/A	N/A	45 - 75
For the following tests, samples are cured 1 h at 150 °C unless otherwise noted.				
3.8	DIELECTRIC STRENGTH, min (ASTM D 149)	15 kV/mm	15 kV/mm	15 kV/mm
3.9	SPECIFIC GRAVITY (ASTM D 792, Method A)	0.96 - 0.98	0.96 - 0.98	0.96 - 0.99
3.10	VOLATILITY, loss, max (2 g for 2 h at 150 °C)	3.0%	3.0%	3.0%
3.11	GLASS TRANSITION Temperature, °C (DSC)	-40	-60	-40