



PRIMER, GLASS, MOISTURE CURE

▽ WSS-M2G314-B2

1. SCOPE

The material defined by this specification is a highly reactive moisture sensitive solvent/resin blend adhesion promoting primer.

2. APPLICATION

This material was released originally for priming windshield glass and providing UV blackout protection for the one component faster moisture curing urethane adhesive, ▽ WSB-M2G316-B4-B7. This primer is referred to as blackout glass primer in the ▽ WSB-M2G316-B4-B7 specification. This primer is applied to glass surfaces prepared with glass primer ▽ WSS-M5B280-C5 or to the glass directly.

2.1 MANUFACTURING PROCESS RECOMMENDATION

This primer is moisture sensitive and requires special handling for manual and automated process.

- Approved suppliers are responsible for maintaining the accuracy and relevancy of these process parameters (in their Process Standard). Approved suppliers must submit any changes to these process parameters in a timely manner (within 30 days) for review and approval by Materials Engineering, Vehicle Operations, and Product Development Engineer.

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

Black

3.3 SHEAR ADHESION

2.5 MPa (1.5 MPa at 90°C) min

(unless otherwise specified)

(SAE J1529, with exceptions below or use FLTM BV 154-03 Section B, para 1 & 2 and Allow adhesive to cure for 7 days at standard atmosphere (23/50).)

Determine shear strength at a speed of 25 mm/minute. A minimum of 5 specimens shall be tested. Report actual values and failure modes. No single value allowed below 2.5 MPa (except at 90°C). Paint delamination is allowed at values above 2.5 MPa.

Date	Action	Revisions	Rev. 2
2013 05 17	Revised	See Summary of Revisions	W. Janitschke, EU
2010 01 07	Revised	See Summary of Revisions	M. Melandru, NA
2008 08 19	Activated		M. Melandru, W. Janitschke



Exposure Conditions - Bonded Test Assemblies:

- Normal (fresh materials) test at R.T., -10 +/- 1 °C., and 43 +/- 2 °C.
- Normal (urethane aged 3 months and primers aged 2 months at 35 +/- 2 °C) test at R.T., - 10 +/- 1 °C., and 43 +/- 2 °C.
- 2 weeks heat age at 90 +/- 2 °C.
- 240 h water immersion at 32 +/- 1 °C. (FLTM BI 104-01).
- 2 weeks humidity age at 98 +/- 2% relative humidity and 38 +/- 2 °C.
- 2000 h Weatherometer (SAE J 1885).
- 2 year Florida exposure, 5° South DWI.
- See specification ▽ WSB-M2G316-B4-B7 para 4.1, 4.2, 4.3, 4.4.

Test Method Exceptions: Lap Shear

Prepare shear assemblies per SAE J1529 or FLTM BV 154-03 section B, para. 1 & 2.

Test panels are to be prepared according to process standards of the adhesives and primer, using production as well as repair enamel.

Dimension of test specimens: 100 x 25 x 6 mm float glass with ceramic coating (▽ WSS-M99P6-C1/C2)

Body steel specimens: 100 x 25 x 0.75 (+/- 0.5 mm).

Brush apply 10µm – 20µm blackout primer to the glass surface. Condition primer at R.T. for 5 minutes min, 72 h max.

Apply 8 mm overlap bead adhesive along the primed glass coupon surface. Within 5 minutes after adhesive application, position the adhesive on the glass coupon in contact with the painted metal surface. Maintain a 5 mm nominal adhesive bondline thickness.

Allow adhesive to cure for 7 d at standard atmosphere (23/50).

Determine the adhesion in a tensile machine having a jaw separation rate of 25 mm/minute. Report strength value and mode of failure.

Note: Any new primer and/or paint system or ceramic coated glass must be tested for adhesion properties. Adhesion values and mode of failure shall be reported prior to approval and release for plant application.