



**COATING, UNDERBODY REPAIR, WATER DISPERSION, HIGH
TEMPERATURE STORAGE STABILITY**

WSK-M5G39-B

**COATING, UNDERBODY REPAIR, WATER DISPERSION, HIGH
TEMPERATURE STORAGE STABILITY**

WSK-M5G39-B3

1. SCOPE

The material defined by this specification is a water dispersion type, solvent free, air and heat drying underbody coating based on styrene-butadiene-rubber.

2. APPLICATION

This specification was released originally for material used for the repair of uncoated body skid areas on non-visible areas of the underbody. This material is mainly applied to grease free panels but also to adjacent electrocoated and PVC underbody coated areas. Prior to the release for a particular application and in addition to the requirements specified herein, full evaluation under actual production conditions must be ensured by affected Component Engineering activity.

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 CONDITIONING AND TEST CONDITIONS

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5% relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

Note: After 90 minutes drying at 23 +/- 2 °C after application the material shall have reached an adhesion to withstand the water leak test in normal production operations without wash-off or displacement. Unless otherwise specified, tests shall be carried out on 300 x 100 x 0.8 - 0.9 mm panels prepared as follows:

- a) on degreased test panels,
- b) on test panels prepared according to FLTM BI 120-01
- c) on test panels prepared according to FLTM BI 120-01, and coated with following PVC underbody coatings:

- SK-M5G9503-A

3.3 COLOR

Dark gray to black (after drying)

Date	Action	Revisions	Rev 02
2011 07 14	Revised	Odor Requirements added	W. Janitschke, EU
2003 04 29	Revised	Para 3.0 inserted; para 3.1, 3.2, 3.18, 3.19 and 4 deleted, para 3.10 and 5.1 revised	
2002 01 10	Revised	Added WSK-M5G39-B3	



Documents

Document Sharing Hub



WSK-M5G39-B/B3

3.4 SOLIDS
(FLTM BV 150-10)

55% min

3.5 ASH
(FLTM BV 150-10)

60% max

3.6 DENSITY AT 20 °C
(ASTM D 1475)

1.36 kg/L max

3.7 VISCOSITY at 20 °C
(Rotational Viscosimeter Brookfield RVT/D, spindle no. 4
(1 rpm, 4 minutes measuring time)

3.7.1 As Received

90 - 160 Pa·s

3.7.2 After Aging,
(WSK-M5G39-B: 336 h at 28 +/- 2 °C)
(WSK-M5G39-B3: 336 h at 40 +/- 2 °C)

160 Pa·s max

3.8 SURFACE CONDITION

The surface shall be dry to touch, free from cracks, bubbles or pin holes and without staining or discoloration.

Test Method:

- . Airless spray coat test panels prepared according to para 3.2, with material under test to a dry film thickness of 0.4 to 0.5 mm
- . Examine specimens:
 - a) after 90 minutes
 - b) after 24 h conditioning at 23 +/- 2 °C followed by 120 h aging at 70 +/- 2 °C , then 1 h at 23 +/- 2 °C.

3.9 ABRASION RESISTANCE
(ASTM D 968)

There shall be no exposed metal area after
200 L gravel impact.

No loss of adhesion
on and around the
area of stone impact.

Test Method:

- . Prepare test specimens in accordance with para 3.8.
- . After conditioning for 24 h at 23 +/- 2 °C, 120 h aging at 70 +/- 2 °C and 1 h at 23 +/- 2 °C determine the abrasion resistance according to ASTM D 968, except I.D. of tube 25 mm and at a gravel throughput rate of 30 - 40 L/h. For each specimen a 5 L volume of fresh gravel shall be used.

Check for abrasion resistance and loss of adhesion after the above gravel impact. Continue abrasion test until exposure of metal area and again check for loss of adhesion.