



Automotive Aftermarket Division

3M™ 50815/50681 High Modulus Low Conductivity Polyurethane Adhesive Sealant

1) Part Numbers

3M™ 58015 310 ml Cartridge
3M™ 50681 415 ml Sausage

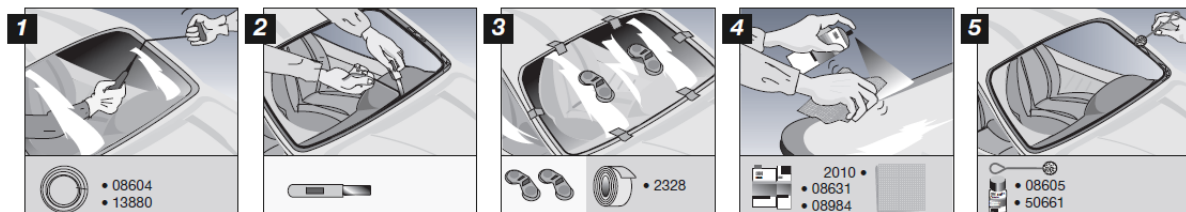
2) Description and end uses

3M™ 58015/50681 is a moisture initiated high modulus low conductivity (HMLC) and fast curing one-component polyurethane adhesive sealant containing isocyanates. It forms a high modulus and flexible joint and can be used to bond glass car windshields in vehicles particularly those made from aluminium.

3) Physical Properties

Colour	A black thixotropic paste
Density at 20°C	1.4 ± 0.005
Skin formation time at 23°C and 50% RH	Ca 15 minutes
Cure time at 23°C and 50% RH	>4 mm / 24 hr
Temperature resistance	- 40 to +90°C
Resistivity	100 million ohms per cm

4) Directions for Use





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primed edges, ceramic edges with pre-applied PU and encapsulated edges use the 50661 Activator and clean without using red Scotch-Brite™. Special instruction: For pre-primed glass, check adhesion of the pre-applied primer before applying 3M™ 50661 Activator. If adhesion is poor remove the pre-applied primer. For glass or tinted glass, the 3M™ 8617 first step primer must be applied before the 58012 Low VOC primer. A frame must be applied on the other side in order to avoid UV exposure.

b) Pinch weld preparation:

1) Where original polyurethane adhesive remains on the body frame, clean with 3M™ 08984 Adhesive Cleaner. Allow to dry before using a knife to reduce the thickness of the polyurethane to 1 mm. Apply 3M™ 58015 / 50681 glass adhesive. Use 3M™ 58012 single step Low VOC primer to protect any exposed bare metal from corrosion. Do not apply any primer on the old polyurethane adhesive.

2) On a newly painted body frame (paint fully cured), apply 3M™ 50661 Activator. Allow to dry for a minimum of 10 minutes. Extrude a bead of 3M™ 58015 / 50681 Glass Adhesive onto the glass or the body frame (depending on car manufacturers' instructions). Install the glass within 10 minutes. Clean any excess adhesive using 3M™ 08984 Adhesive Cleaner. Application temperature is +10°C to +35°C.

Features	Advantages	Benefits
Final Shore A hardness	>60	Passes ISO 868-3 seconds
Shearing resistance	>2.4MPa	Passes ISO 4587
Shearing resistance at 5 hr at 23°C and 50% RH	>0.9MPa (>130 psi)	Passes FORD SAE J 1529
Shearing resistance at 7 days at 23°C and 50% RH	>3.5MPa (>500 psi)	Passes FORD SAE J 1529
Modulus G10	>2.2MPa	Passes DIN 54451
Water and salt spray resistance	Excellent	
Elongation break	>300%	Passes ISO 37
Modulus at 100%	Ca 3.5 MPa	Passes ISO 37
Modulus at break	>6 MPa	Passes ISO 37
Specific resistivity	Ca 100 million ohms per cam	
Crash test	Resists after 1 hr at 5°C and 50% RH	Passes FMVSS 212 (standard automotive crash test)



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5) Storage

9 months in hermetically sealed original packaging between 5 and 25°C.
Store cartridges at approximately 20 °C before use.

6) Safety

7)

Highly flammable. Extinguish all sources of ignition before use.
Harmful. Read material safety data sheet before use.
Do not breathe fumes and do not allow skin contact.

3M™ 50815/50681 High Modulus Low Conductivity Polyurethane Adhesive Sealant is designed FOR PROFESSIONAL INDUSTRIAL USE ONLY.

8) Disclaimer

All statements, technical information and recommendations are based on tests we believe to be reliable but the accuracy or completeness thereof is not guaranteed. Please ensure before using our product that it is suitable for your intended use. All questions of reliability relating to this product are governed by the Terms of Sale subject, where applicable, to the prevailing law.



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