



Automotive Aftermarket Division

3M™ 58015/50681 High Modulus Low Conductivity Polyurethane Adhesive Sealant

1) Part Numbers

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

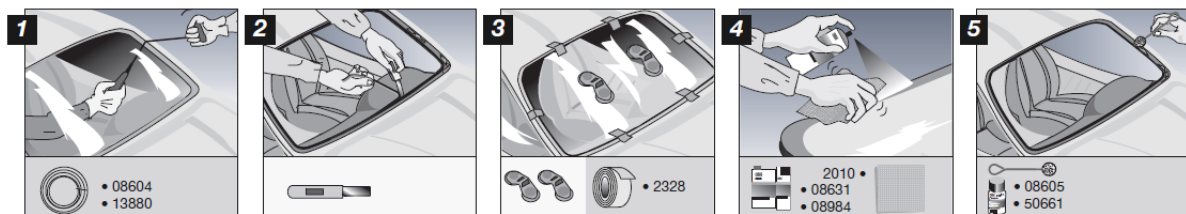
2) Description and end uses

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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Ceramic Ceramique Keramik Keramika Keramien Keramien Keramisk Ceramica Ceramica Ceramica	Keramisk Keramik Ceramico Ceramika Keramik Keramisk Ceramica Ceramica Ceramica	Keramikas Stiklas su keramine juostele Ceramica С керамической пленкой Keramik Keramisk Keramien Keramika Ceramik Keramika	PU Encapsulated Encapsulé PU Verpackung PU Verpackung PU Kasettialat PU Inkapsulat PU Encapsulado PU Farasjet PU Encapsulado PU Inkapsulat	PU Evbuksuyivo PU Inkapsulato Polimerizatsiya PU Kerelas PU zapuzdreni Zapuzdreny PU PU Skapsulovan PU Hemsedik PU Inkapsulats Stiklas su PU remeliu	PU protejant С полимерной пленкой Облицовочный материал С предарматурно нанесено PU лепило Облицовочный материал PU Inkapsulats Stiklas su PU remeliu	Pre-applied PU Pre-appliqué PU Vorverarbeitet PU Vorverarbeitetes PU Vaha PU-lina Tallige re päht PU Pre-aplicação PU Foliar etno aplicado anteriormente	Föraraplicerad PU Ms preeppoyoyevny PU PU pre-appliqué Wahne polycya polimernam Eižovleg felvitit PU Priedem aplikovaný PU Vopred aplikovaný PU Prej nanesen PU Eižovpaldetud PU Iepriekš nolikāts ar PU	Stiklas, padengtas PU klijais PU preaplicat Co stikam polimerizatsiya Tumskai naneseno PU lejilo C predarimaturno naneseno PU lepilo Fabrički nanesen PU lepak Onceden PU uygulanen PU lepkai nanesen PU lejilo	Preprimed Pre-prímé Mit febevermittelte belandert Voorgeprimed Esi primed Tallige re primet Pre primario Far-primet Impregnación previa Förprimad	Ms preeppoyoyevno Actipri Pre-primér tzsato Wahne polycya polimernam Eižovleg primerezett Opafeno zakladnim naterem Vopred aplikovaný primer Prej nanesen primer Kraut Iepriekš gruntēts Gruntotas stiklas	Primer preaplicat Zarguytovannoe Tumskai nanesen primer Predarimaturno nanesen primlak Fabrički nanesen primer Onceden primerlenim Lepki nanesen primer Lepki nanesen primer
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6a

10 mins

58012 Low VOC

08603, 08615, 08616, 08613, 08628, 08629, 58015, 50681

• 08605
• 58012

6b

10 mins

50661

08603, 08615, 08616, 08613, 08628, 08629, 58015, 50681

• 08605
• 50661

6c

10 mins

Pre-applied PU
50661

08603, 08615, 08616, 08613, 08628, 08629, 58015, 50681

• 08605
• 50661

6d

10 mins

50661

08603, 08615, 08616, 08613, 08628, 08629, 58015, 50681

• 08605
• 50661

7a

• 08613 • 08628 • 08629
• 08603 • 08615 • 08616
• 58015 • 50681

7b

• 08613 • 08628 • 08629
• 08603 • 08615 • 08616
• 58015 • 50681

8

9

2010
• 08631

310ml		• 08012
310ml / 415ml		• 08013 • 08993
310ml / 415ml		• 08006

3M PRODUCT Application	58012 Single Step Primer Low VOC	08617 Bottle WSD Clear	50661 Activator
Fritted Glass - 6a	✓		
Encapsulated Glass (PU or PVC) - 6b			✓
Pre-primed - 6d			✓
Fritted Glass with pre-applied PU - 6c			✓
Lacquered steel or Aluminium - 5			✓
Steel-Aluminium without paint (spot repair) - 5	✓		
Glass or Tinted Glass*	✓	✓	

Never use alcohol. *The primer must not be directly under UV exposure, a frame has to be applied on the other side in order to avoid UV exposure.

Drive Away Time Temps de libération du véhicule Wegfahrzeit Rijklaartijd Kuivumisaika "Kjer i vei tid" Tempo de condução Tempo de seguridad antes de conducir Klar att köra Χρόνος Αποχώρησης Αυτοκινήτου Tempo di riconsegna vettura Gotowość do jazdy Teljes száradási idő	Doba před jízdou Bezpečný čas do odjízdu vozidla Čas varnega odhoda Sõiduks valmis Žiššanas laiks Dziūvimo laiks Temp de imobilizare Время высыхания Vrijeme sušenja Време за сушене Vreme sušenja Uygulama sonrası yola çıkış zamanı תוך המתנה לפני תחילת הריגה	08603 / 08615 / 08616 310ml 310ml 415ml	08613 / 08628 / 08629 310ml 310ml 415ml	58015 / 50681 310ml 415ml
	4 Hours/Heures/Stunden/Урен/Turbia/Timer/Horas/Timer/Horas/Timer/Годины/Ораки/Hodiny/Hodiny/Use/Tundi/Stundas/val./Ora/4ac./sata/4ac066/sata/Saatler/ת/ש	90 Minutes/m/Minuten/Minuten/Minutia/Minuter/Minutos/Minuter/Minuty/Minuta/Minutis/Minutis/min./Minuta/Min./minuta/Minut/Minuta/Dakikalar/ת/ק	60 Minutes/m/Minuten/Minuten/Minutia/Minuter/Minutos/Minuter/Minuty/Minuta/Minutis/Minutis/min./Minuta/Min./minuta/Minut/Minuta/Dakikalar/ת/ק	60 Minutes/m/Minuten/Minuten/Minutia/Minuter/Minutos/Minuter/Minuty/Minuta/Minutis/Minutis/min./Minuta/Min./minuta/Minut/Minuta/Dakikalar/ת/ק
	8 Hours/Heures/Stunden/Урен/Turbia/Timer/Horas/Timer/Horas/Timer/Годины/Ораки/Hodiny/Hodiny/Use/Tundi/Stundas/val./Ora/4ac./sata/4ac066/sata/Saatler/ת/ש	3 Hours/Heures/Stunden/Урен/Turbia/Timer/Horas/Timer/Horas/Timer/Годины/Ораки/Hodiny/Hodiny/Use/Tundi/Stundas/val./Ora/4ac./sata/4ac066/sata/Saatler/ת/ש	60 Minutes/m/Minuten/Minuten/Minutia/Minuter/Minutos/Minuter/Minuty/Minuta/Minutis/Minutis/min./Minuta/Min./minuta/Minut/Minuta/Dakikalar/ת/ק	60 Minutes/m/Minuten/Minuten/Minutia/Minuter/Minutos/Minuter/Minuty/Minuta/Minutis/Minutis/min./Minuta/Min./minuta/Minut/Minuta/Dakikalar/ת/ק

a) **Glass preparation:**
 Always ensure that surfaces are clean and free from contamination. Use 08631 Glass cleaner or 08984 Adhesive cleaner on red Scotch-Brite™. Clean with a light action. Wipe over surface with 08631 Glass cleaner or 08984 Adhesive cleaner on a clean wipe. Shake 58012 single step Low VOC primer for 30 seconds before use, ensuring the metal ball contained within is moving freely. Apply a thin layer of 58012 single step Low VOC primer to the glass ceramic and leave for a minimum of 10 minutes (see Fig. 6A). For pre-



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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

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™ 58015/50681 High Modulus Low Conductivity Polyurethane Adhesive Sealant is designed FOR PROFESSIONAL INDUSTRIAL USE ONLY.

7) Disclaimer

All statements, technical information and recommendations are based on tests we believe to be reliable as at the date of hereof, but the accuracy or completeness thereof is not guaranteed. Please ensure before using the product that it is suitable for your intended use. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, other than for fraudulent misrepresentation, 3M expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information



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For Additional Health and Safety Information

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