

Effective: 05/06/2020 Supersedes: 28/02/2020

Automotive Aftermarket Division

3M™ 08613/08628/08629 One Part Polyurethane Fast Cure Glass Bonding Adhesive

1) Part Numbers

3M™ 08613		310 ml cartridge
3M™ 08628	:	310 ml sachet
3M™ 08629		415 ml sachet
Dispensing	:	3M™ 08012 air-powered gun (for
system		cartridge)
		3M™ 08006 air-powered gun (for
		sachet)
		3M™ 08013 manual gun (for 310 ml
		cartridge or sachet)
		3M™ 08993 universal gun (for 310 ml
		cartridge or sachet)

2) Description and end uses'

3M[™] 08613 is a high-viscosity one component, moisture curing polyurethane adhesive designed specifically for bonding windscreens and rear windows, in accordance with main car manufacturer's specifications.

3M[™] 08613 is used with associated primers:

- 3M[™] Glass Adhesion Promoter (3M[™] 08617).
- 3M[™] Glass and Paint Black Primer (3M[™] 08614).

3M™ 08613 is an adhesive that must be used for glass replacement or installation when a structural bond is required; this includes all the replacement for new windscreens and rear windows today bonded in O.E.M. with P.U. sealers.

High viscosity urethane products provide windscreen support, while the cure is attained to provide structural strength.



Effective: 05/06/2020 Supersedes: 28/02/2020

3) Physical Properties

Dana	0
Base	One-part moisture curing polyurethane
Consistency	Thick thixotropic paste
Colour	Black
Density	1.2
Solids content	>99 % (typical)
Tack Free Time	30 minutes (typical at 23°C, 50% RH)
Open time	10-15 minutes (typical at 23°C, 50% RH)
Cure through rate	3.8 mm after 24 hours (typical at 23°C, 50%
	RH)
Final Hardness	55-60 Shore A (typical)
Tensile strength (DIN 53504)	7 MPa
Elongation at break (DIN 53504)	> 400%
Ultimate Overlap Shear Strength	4 MPa
Safe drive away time	90 minutes minimum, for cars without airbag (at 23°C, 50% RH) 3 hours minimum, for cars with airbags (at 21°C, 54%RH)
Temperature resistance	-25°C to + 90°C
Temperature of application	+ 5°C to + 35°C

- Fast cure, rapid strength.
- High viscosity: immediate windshield support.
- When fully cured, meets OEM strength requirements.
- Successfully passes a real crash test following US standard FMVSS 212 with double airbags and non-attached dummies, after 3 hours at 21°C, 54%RH.
- TÜV approved.

4) Directions for Use

1. Remove old windscreen, wiper arms and trim necessary to expose the entire perimeter of glass.

3M

Technical Data Sheet

Effective: 05/06/2020 Supersedes: 28/02/2020

- 2. Inspect urethane remaining on pinchweld for loose or unbonded areas. If existing urethane is not securely bonded, remove. Remove any rust and prime any bare or scratched metal with 3M™ Black Primer N°2.
 - Note: when excessive abrasive cleaning is required, prime pinchweld metal with an OEM recommended curing automotive paint primer and allow to cure properly.
- 3. Dry set the replacement glass into opening and align for uniform fit.
- 4. Glass preparation:
- a) Clean replacement windscreen with 3M[™] Glass Cleaner 3M[™] 08631 taking care to carefully clean surface where the adhesive bond will be made. Wipe dry.
- b) Apply the *Glass Adhesion Promoter N°1* (3M[™] 08617 or 3M[™] 08632) to clean and prepare the glass ceramic edges. Wipe-off immediately. Apply a second time, wipe-off and allow it to dry and activate the glass surface for 10 minutes minimum.
- c) Apply the *Glass and Paint Black Primer N°2* (3M[™] 08614 or 3M[™] 08633) over the primer N°1. Let it dry 10 minutes.
 - Note: if temperature in shop is below 15°C, allow primer to dry longer, up to 20 minutes to get proper surface preparation.
- 5. Pinchweld preparation:
- a) In case of old polyurethane sealer remaining on the body frame, use a knife to reduce the remaining sealer to a thickness of 1 mm. If needed, clean its surface with 3M[™] 08984 Adhesive Cleaner and let it dry 10 minutes. Then apply 3M[™] 08613 / 08628 / 08629 adhesive on.
- b) On newly painted body frame (paint fully cured), apply the primer **N°2**. Let it dry 10 minutes. Then apply 3M™ 08613 / 08628 / 08629 adhesive on.

Note: paint surface must be dried, degreased and free from dust.

- 6. Extrude a bead of 3M™ 08613 / 08628 / 08629 adhesive on the glass or on the body frame (depending on manufacturer's instructions). Extrude adhesive at sufficient height to assure proper wet-out of both glass and pinchweld is achieved when windscreen is set.
- 7. Set the glass, using the appropriate marks, within 15 minutes following the application of the adhesive.
- 8. Install trim mouldings and hardware.
- 9. Clean any excess using 3M™ 08984 Adhesive Cleaner.
- 10. <u>Precautions to be taken after assembly</u>: the curing time of 3M[™] 08613 / 08628 / 08629 adhesive depends upon atmospheric humidity and temperature. The vehicle



Effective: 05/06/2020 Supersedes: 28/02/2020

must remain stationary for a minimum of 90 min. (for cars without airbags) or 3 hours (for cars with airbags).

5) Storage

Storage conditions	Cool dry place. Best results are obtained when material is stored and applied at room temperature, 15 to 30°C.
Shelf life	9 months from date of manufacture under normal storage conditions. Refer to 'Best Before Date" on cartridge or sachet.

6) Safety

Please refer to the Material Safety Data Sheet or contact your local 3M™ Toxicology Department.

3M[™] 08613/08628/08629 is designed FOR PROFESSIONAL INDUSTRIAL USE ONLY.

7) 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.



Effective: 05/06/2020 Supersedes: 28/02/2020

3M South Africa & Sub-Saharan Africa, 146A Kelvin Drive, Woodmead, Sandton, South Africa, Tel: (0861) 225536

3M (East) AG Representation Office Tirane, Rruga Sami Frasheri, Pallati i Ri Perxhola Kati 2 Ap2, 1000 Albania

3M Arabia, LLC, Building 24-25 3M Saudi Arabia Zone C, Business Gate, Airport Road, Riyadh, Saudi Arabia

3M Bulgaria, Mladost 4, Business Park, bl.4, 2nd floor, Sofia 1766, Bulgaria

3M Česko, spol. s r.o., V Parku 2343/24, 148 00 - Praha 4, Czech Republic

3M (East) AG, Branch office Croatia, Avenija Većeslava Holjevca 40, 10 000 Zagreb, Croatia, Tel: +385 1 2499750, www.3m.com.hr

3M Egypt, Finance Center, New Cairo, Plot 140, Banking Sector, 5th settlement, Cairo, Egypt

3M Hellas MEPE, Automotive Aftermarket Division, 20 Kifisias Avenue, 151 25 Marousi, Greece,

Phone: +30 210 68 85 300, innovation.gr@mmm.com, www.3M.gr

3M Hungária Kft, Neumann János u. 1/E, 1117 Budapest, Hungary

3M Israel, 91 Medinat Hayehudim St., Herzliya, Israel

3M Kenya Ltd, Victoria Towers, 3rd Floor, Kilimanjaro Av, Upperhill, Kenya

3M Gulf Limited, Ein El Mreisseh, Saint Charles City Center, 4th. Floor, P.O.Box: 11-5025, Riad el Solh, Beirut 1107 2180 Lebanon

3M Minnesota Mining & Manufacturing Nigeria Limited, No 2 Sheraton Opebi Link Road, Ikeja, Lagos Nigeria

3M Pakistan, Islamic Chamber of Commerce Building, ST-2/A, Block 9, KDA Scheme 5, Clifton, Karachi, Pakistan

3M Poland, Al. Katowicka 117, Kajetany, 05-830 Nadarzyn, Poland, Telefon: +48 22 739 60 00, www.3m.pl/kontakt

3M Gulf (Representation Office), Suhaim Bin Hamad St., Al Mana Towers Tower B, 2nd Floor, Office No.4, Doha Qatar, P.O.Box 14685

3M Romania,12 Menuetului St., Bucharest Business Park, Building D, District 1 013713 Bucharest, Romania

3M (East) AG, Representation Office Serbia, Airport City, Omladinskih brigada 90B, 11070 Belgrade, Serbia, Tel: +381 11 2209 400, www.3m.co.rs/3M/sr RS/3m-south-east-europe/

3M Slovensko s.r.o., Polus Tower 2, Vajnorská 100/B, 83104 Bratislava

3M (East) AG, Branch office Slovenia, Cesta v Gorice 8, 1000, Ljubljana, Slovenia,

Tel: +386 1 2003 630, www.3m.com/3M/sl SI/3m-south-east-europe/

3M Sanayi ve Ticaret As, Barbaros Mah., Mor Sümbül Sok., No:7/3F, 27-51, Nidakule Ataşehir Güney, 34746 Ataşehir, İstanbul, Turkey

3M Gulf Limited, Dubai Internet City, Building No. 11, 3rd Floor, U.A.E

© 3M 2020. 3M is a trademark of the 3M company. All rights reserved