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TS Data Sheet 08693
08695
08564

Public

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Effective: 01/15/2001

Status: Active

**Auto Glass Windshield Urethane
(Medium Viscosity)**

Data Sheet

3M Part No.(s)	3M Part Descriptor(s)
08693	310 ml Cartridge
08695	450 ml Flexible Package
08564	600 ml Flexible Package

3M Fax on Demand Identification Number:

Description

3M Auto Glass Windshield Urethane (Medium Viscosity) products are one-part, moisture curing urethanes which provide a fast cure, high strength material designed for the reinstallation of vehicle windshields, backlites, and sidelites.

Features, Advantages, Benefits

- | | |
|-------------------|--|
| Features | <ul style="list-style-type: none"> ● Fast Cure ● 10-15 Minute Work Time ● Non-Sag ● Job Size Flexible packages |
| Advantages | <ul style="list-style-type: none"> ● Easy Clean Up ● Easy Gunning ● Easy Use System |

Benefits

Typical Physical Properties

Container	310 ml (10.5 fl/oz) Cartridge	450 ml (15.2 fl/oz) Flex Pack 600 ml (20.3 fl/oz) Flex Pack
Base	Polyurethane	
Density lbs/Gallon (Appx.)	9.8 - 10.0	
Color	Black	
Solids Content (Appx.)	>95%	
Work Time	10 - 15 Minutes (75°F/50% R.H.)	

Shelf life 12 Months (Store between 40° - 80°F)

Product Uses

For bonding automotive stationary glass.

Performance Properties

Tensile:	1200 PSI
Elongation:	750%
Hardness (Shore A):	50-55
Cure Through	24 Hours @ 50%RH, 75°F
Overlap Shear Strength: (SAE J1529) (50% RH, 75°F)	
6 Hours	60 PSI
72 Hours	550 PSI

Handling and Application Information

Directions for Use

Full Cutout Method With a Dam Material

The following instructions cover replacement procedure for urethane bonded automotive windshields using the full cut out procedure with dam material.

The dam material provides the proper setting height.

1. Remove windshield wiper arms and trim necessary to expose the entire perimeter of glass.
2. Clean dirt and debris from around the pinchweld area before cutting out the glass and again after the glass is cut out to minimize contamination.
3. Cut into existing urethane around entire perimeter of glass with a utility knife. Cut as close to edge as possible.
4. Cut out glass with appropriate removal tools keeping as close to the glass as possible. Remove the glass and repeat Step 2.
5. Dry set the glass. Align for uniform fit and adjust setting blocks as needed for best fit, to allow for sufficient bonding of urethane, make sure there is a MINIMUM of 1/4 inch of glass, in addition to the space that will be taken up by any dam material, around the entire perimeter of the glass. Mark location by applying masking tape to windshield and car body. Slit tape at edge of glass. Remove windshield.
6. Remove major portion of old urethane adhesive from the pinchweld. Use a razor blade knife or utility knife to prevent scraping the paint off the pinchweld and exposing bare metal. **NOTE:** On urethane installations, it is recommended that a thin film of the old urethane be left on the pinchweld and fresh urethane bonded to remaining film. When removing butyl tape or unknown material, remove all old material from pinchweld before applying fresh urethane.
7. Prime any bare metal scratches with 3M Black Urethane Primer, (P/N 08684, 08686). **NOTE:** When excessive abrasive cleaning is required, prime pinchweld metal with an OEM recommended automotive paint primer and allow to cure properly. Apply 3M Black Urethane Primer to repaired area and allow to dry for 5-10 minutes.
8. Clean inside surface of glass with 3M Glass Cleaner, P/N 0888 taking care to clean surface where the urethane bond will be made.
9. Apply a thin film of 3M Primer/Degreaser, (P/N 08683, 08685, or 08691) to match the OEM bond line area on the glass with a clean wipe. Wipe off excess primer while still wet. Allow to dry for approximately 5 minutes.
10. Apply 3M Black Urethane Primer (P/N 08684, 08686, or 08692) over the primed bond area of glass.

Allow primer to dry for 5-10 minutes.

11. Apply appropriate size dam material to inside edge of pinchweld. Recommend using 3M Single-Sided Foam Dam Tape.
12. Cut tip to desired shape and size large enough to be slightly higher than the dam material. A triangular shaped notch will provide the desired bead shape and height. A height of 1/2 to 9/16 inch and a 1/4 - 5/16 inch base is suggested. **NOTE:** When installing encapsulated glasses, apply a bead high enough to assure glass contact before encapsulation contacts the car body and prevents further setting. Back paddling material after setting will not be possible.
13. Apply 3M Auto Glass Ur ethane Windshield Adhesive - MV directly onto the remaining OEM urethane film, behind and contacting the dam material.
14. Position the glass by aligning the masking tape on the glass and car body. Press glass in place to assure complete contact with dam material and urethane adhesive.
15. Paddle squeeze out around edge of glass if possible.
16. Remove masking tape alignment strips.
17. Replace moldings, windshield wipers and other trim removed in Step 1.
18. Clean any excess urethane with adhesive cleaner.

Applications

Installation of windshields, backlites and sidelite using the full cutout or partial cutout installation methods. Full cutout installations will require the use of dam materials. Where dam materials are not used, the use of spacers is recommended to insure proper set height. 3M™ Applicator Guns, P/N 08993 (Cartridge), and P/N 08991 (Flex Pack) are 18:1 ratio caulk guns. PN08394 3M™ Battery Operated Caulking Gun can be used for easier caulking of the flexible packages.

Storage and Handling

Store between 40° - 80°F. Rotate stock on a "first-in, first-out" basis. When stored at the recommended conditions in original, unopened containers, this product has a shelf life of 12 months.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product.

Country

US

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Important Notice to Purchaser

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* If 'Directions for Use' reference P.N.'s 8984, 8986, or 8987, please read below.

Federal and local air quality regulations may regulate or prohibit the use of surface preparation and cleanup solvents based on VOC content. Consult your local and Federal air quality regulations for information. When using solvents, use in a well ventilated area. Extinguish all sources of ignition in the work area and observe precautionary measures for handling these materials. Refer to product label and MSDS for P.N. 8984, 8986, or 8987 for detailed precautionary information.

LIMITATION OF REMEDIES AND LIABILITY: If the 3M product is proved to be defective, **THE EXCLUSIVE REMEDY,**

AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M PRODUCT.

3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.

For Additional Health and Safety Information

See Material Safety Data Sheet (Fax on Demand 1-800-305-0419), or call: **3M Automotive Aftermarket Division** 3M Center, Building 223-6N-01

Phone: 877-MMM-CARS (877-666-2277)

3M Fax on Demand Identification Number

Reference: Goto Ref

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