



SMC/FRP Repair - 35

08219

Technical Data

December, 2010

Product Description

Two-part urethane used to bond sheet molded compound (SMC), and fiber glass reinforced polyester (FRP) body panels to each other and to metal frames. Metal must be primed with a two-part epoxy primer.

Features

- Excellent sag resistance
- Matches OEM appearance
- 200 ml Dual-Syringe Cartridge System

Typical Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Container	200 ml dual-syringe cartridge
Base	Urethane
Density lbs/Gallon (Appx.)	9.8 / 9.0
Color	Brown / Green
Flash Point	>200°C
Solids Content (Appx.)	100%
Consistency	Thixotropic Paste
Solvent	None
Service Temperature - °F	-40° to 180°F

Product Uses

Bonding of sheet molded compound (SMC) and fiber glass reinforced polyester (FRP) body panels to each other and to metal frames. Metal must be primed with a two-part epoxy primer.

Use with the following applicators: PN 08571 (manual), PN 08117 (manual), and PN 09930 (pneumatic).

3M™ Static Mixing Nozzle: PN 08193 (6/bag), PN 08194 (50/box).

Note: Do not apply polyester based body filler products directly to this product.

3M™ SMC/FRP Repair - 35

08219

Typical Performance Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

The following times have been determined with ambient air temperature and substrate temperature @ 70°F and are considered typical values.

WORK TIME:

30 minutes

MIX NOZZLE DWELL TIME:

15 minutes

CLAMP TIME

2 hours

CURE TIME:

24 hours

Lap Shear, SMC	995 PSI	ASTM D3163
Lap Shear, Metton®	1,559 PSI	ASTM D1002 / 2" per minute

Overlap shear test method: Over lap shear test for adhesion determined in accordance with ASTM D1002. Sample dimensions 1" x 4" x .0111" with an overlap area of 1/2" x 1". Plastics cleaned with 3M™ General Purpose Adhesive Cleaner PN 08984 and DA sanded with P80 abrasive. Thermopolyolefin and Polypropylene plastics coated with 3M™ Polyolefin Adhesion Promoter PN 05907.

3M™ SMC/FRP Repair - 35

08219

Directions for Use

SURFACE PREPARATION:

1. Wash surface with soap and water to remove water soluble contaminants. Follow the soap and water wash with an appropriate 3M VOC compliant product for removal of surface contaminants. Reference the 3M Automotive Aftermarket Catalog for a suitable VOC compliant product.
2. Prime clean, abraded metal surfaces with a two part primer (epoxy or urethane, NOT acid-etch).
3. Sand plastic surfaces with a 3M grade P80 abrasive. Primed metal surfaces should be scuffed with a Scotch-Brite™ General Purpose Scuff Pad (Ultrafine PN 07448).
4. Remove dust from surface using clean, un-oiled compressed air and a clean, dry rag.

PRODUCT PREPARATION:

1. Insert cartridge into applicator gun.
2. Remove retaining collar and plug from end of cartridge. Discard plug, save retaining collar.
3. Extrude a small amount of product until both parts A and B dispense equally.
4. Attach 3M™ Mixing Nozzle (PN 08193) to cartridge and lock in place with retaining collar.
5. Dispense a small amount of material and discard.

GENERAL REPAIR PROCESS:

1. Apply adhesive to one of the parts and assemble the parts within 25 minutes or less.
2. Clamp parts together for 2 hours.

NOTE: Allow to cure 24 hours before putting repaired part into service.

CLEAN-UP:

Prior to curing, PN 08219 may be cleaned from most surfaces with an appropriate 3M VOC compliant product for removal of surface contaminants. Reference the 3M Automotive Aftermarket Catalog for a suitable VOC compliant product.

Applications

May be used to bond properly prepared composite plastics and primer coated sheet metal.

Storage and Handling

When stored at the recommended conditions in original, unopened containers, this product has a shelf life of 12 months from the date of manufacture. Store at room temperature in a dry environment. Rotate stock on a first in first out basis.

After use, leave mix nozzle in place to seal the cartridge.

3M™ SMC/FRP Repair - 35

08219

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product. Always wear gloves, eye protection, appropriate respiratory protection, and work in a well-ventilated area. Refer to MSDS for specific safety information.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer

Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

For Additional Health and Safety Information



Automotive Aftermarket Division

3M Center, Building 223-6N-01
St. Paul, MN 55144-1000
1-877-666-2277 (1-877-MMM-CARS)
www.3M.com/automotive

3M and Scotch-Brite are trademarks of 3M Company.
Metton is a registered trademark of Metton America.
Printed in U.S.A.
©3M 2010 P.N. 08219 (12/10)