



# Rigid Parts Repair

08275

Technical Data

November 2017

## Detailed Product Description

3M™ Rigid Parts Repair is a two-part epoxy used to repair Sheet Molding Compound (SMC), Fiberglass Reinforced Polyester (FRP), and other rigid composite plastic parts.

## Features

- Rigid two- part epoxy
- 400 ml dual-syringe cartridge system
- Metered static mixing

## 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.**

<b>Container</b>	400 mL dual-syringe cartridge
<b>Base</b>	Epoxy
<b>Density lbs/Gallon (Approx.)</b>	8.3 / 8.3
<b>Color</b>	Blue / White
<b>Solids Content (Approx.)</b>	100%
<b>Consistency</b>	Paste
<b>Service Temperature - °F</b>	-20° to 180°F

## Product Uses

For repairing rigid composite materials, such as fiberglass, SMC and carbon fiber.

If reinforcing a puncture, tear, or hole, use this product on the front and back side, along with reinforcing fiberglass cloth or mat on the back side.

**Use with the following applicators: PN 08284 (manual) and PN 08280 (pneumatic).**

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

**For professional use only. Not intended for retail sale.**

# 3M™ Rigid Parts Repair

08275

---

## Typical Performance Properties

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

WORK TIME:  
10 minutes

MIX NOZZLE DWELL TIME:  
8 minutes

SAND TIME:  
30 minutes

CURE TIME:  
4 hours

PAINT TIME:  
30 minutes

**Note:** The following technical information and data should be considered representative or typical only and should not be used for specification purposes. Cure time may be reduced by the addition of heat. Maximum heat 140°F for 15 minutes, allow material to cool at room temperature prior to next process step.

<b>Lap Shear, SMC</b>	<b>966 psi</b>	ASTM D1002 / 2" per minute
<b>Lap Shear, FRP</b>	<b>1040 psi</b>	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".

# 3M™ Rigid Parts Repair

## 08275

### 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 VOC compliant product for removal of surface contaminants.
2. Sand the surface with a grade 60 or P80 abrasive.
3. Remove dust from surface using clean, un-oiled compressed air and a clean, dry rag.

**Note:** If using to repair Metton® plastic, be sure to use 3M™ Polyolefin Adhesion Promoter (PN 05907) before applying adhesive, to insure a good bond.

### 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. NOTE: If you choose not to use a mixing nozzle, extrude the amount of filler required, and mix by hand to a uniform color.
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. After use, leave mix nozzle in place to seal the cartridge.

### GENERAL REPAIR PROCESS:

1. Apply a thin coat of mixed material to the repair area using a clean plastic spreader, making certain to completely “WET OUT” the surface. For a front side cosmetic repair immediately add additional mixed material, building up the repair higher than the surrounding, undamaged area. For a back side reinforcement repair, saturate and apply fiberglass mat or cloth to the back side of the repair area.
2. Allow material to cure 30 minutes.
3. For a front side cosmetic repair, shape sand with a grade P80 and final sand with a grade 180 abrasive followed by grade 240 and/or 320. A back side reinforcement is complete and does not require sanding.
4. Remove dust from surface using clean, un-oiled compressed air and a clean, dry rag. NOTE: DO NOT SOLVENT WIPE.

### CLEAN UP:

Unmixed material may be cleaned from most surfaces with an appropriate VOC compliant product.

### APPLICATION WARNINGS:

**Once the initial cleaning steps are completed, do not solvent wipe the repair area again.**

---

**Applications** 3M™ Rigid Parts Repair may be used as a cosmetic repair material as well as a reinforcement repair material on Sheet Molded Compound (SMC), Fiberglass Reinforced Polyester (FRP), Metton® and other rigid composite plastic parts.

---

## Storage and Handling

### STORAGE

When stored at the recommended conditions in original, unopened containers, this product has a shelf life of at least 24 months from the date of manufacture. Store in a dry place at room temperature conditions for optimal shelf life.

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

### HANDLING

Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep out of the reach of children. Avoid eye contact with dust or airborne particles.

---

## Precautionary Information

Before using this product, please reference Product Label and/or Safety Data Sheet for Health and Safety Information. Note: Laws controlling the acceptable amounts of Volatile Organic Compounds (VOC's) vary by state, and in some cases by locality. For surface preparation and clean-up activities, consult federal, state and local regulations regarding use of products containing VOCs in your area.

**IMPORTANT NOTE:** There are many factors that can affect an individual repair, so the technician and repair facility need to evaluate each specific application and repair process and determine what's appropriate. 3M recommends referring to relevant vehicle repair and OEM guidelines prior to starting all repairs.

---

## 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.



### 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 is a trademark of 3M Company.  
Printed in U.S.A.  
©3M 2017 P.N. 05885 (11/17)