



EZ Sand Rigid Parts Repair

05885

Technical Data

August, 2010

Detailed Product Description

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

Features

- Rigid two- part epoxy
- 200 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.

Container	200 mL dual-syringe cartridge
Base	Epoxy
Density lbs/Gallon (Approx.)	8.3 / 8.3
Color	Blue / White
Solids Content (Approx.)	100%
Consistency	Paste
Service Temperature - °F	-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 08571 (manual), PN 08117 (manual), and PN 09930 (pneumatic).

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

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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.

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

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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. Sand the surface with a grade 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; immediately add additional mixed material, building up the repair higher than the surrounding, undamaged area.
2. Allow material to cure 30 minutes.
3. Sand with a grade 180 abrasive followed by grade 240 and/or 320.
4. Remove dust from surface using clean, un-oiled compressed air and a clean, dry rag NOTE: DO NOT SOLVENT WIPE.

APPLICATION WARNINGS:

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

Applications

3M™ EZ Sand Rigid Parts Repair may be used as a cosmetic repair material as well as a reinforcing bonder on composite plastic substrates.

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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

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.

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For Additional Health and Safety Information



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