



Reinforced Filler

05877

Technical Data Sheet

June 2017

3M Part No.(s)	3M Part Descriptor(s)
05877	3M™ Reinforced Filler

Product Description 3M™ Reinforced Filler PN 05877 is a two component, resin rich filler formula, containing milled fiberglass and packaged in a 300 ml Dual Cartridge System. 3M™ Reinforced Filler PN 05877 offers excellent adhesion to steel, galvanized steel, aluminum, E-coat, sheet molded compound (SMC), fiberglass (FRP), concrete and wood substrates, and provides additional strength when deeper fill and gap spanning capability is needed. 3M™ Reinforced Filler PN 05877 is designed to be used with the 3M™ Dynamic Mixing applicator (PN 05846).

- Features**
- 276 ml Dual Cartridge System
 - 50:1 mix ratio
 - Milled Fiberglass
 - Water resistant

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.

	Part A - Filler	Part B - Hardener
Container	Two Part Cartridge - (300ml)	Two Part Cartridge - (6ml)
Base	Polyester Resin with Styrene Monomer	Benzoyl Peroxide
Density lbs/Gallon (Appx.)	13.6 lbs/gallon	10 lbs/gallon
Color	Green	Blue
Flash Point	89°F (31°C)	N/A
Viscosity	1,000,000 -1,400,000 cps	N/A
Consistency	Highly viscous paste	Viscous paste
Service Temperature	Min. -20°F (-29°C) Max. 180°F (82°C)	N/A
Application Temperature	Min. 60°F (15°C) Max. 110°F (43°C)	N/A

3M™ Reinforced Filler

05877

Product Uses

3M™ Reinforced Filler PN 05877 is designed to be used as a reinforcement material when repairing holes, cracks or tears in metal, sheet molded compound (SMC), and Fiberglass (FRP) panels. 3M™ Reinforced Filler should be used in conjunction with proper reinforcing products and repair procedures. When used properly it offers excellent sag resistance and high build and gap filling characteristics increasing repair strength and reducing application of traditional body filler.

For professional use only. Not intended for retail sale.

Typical Performance Properties

The following times have been determined with ambient air temperature and substrate temperature @ 72°F (22°C) and are considered typical values.

WORK TIME:

3 to 4 minutes

SANDING TIME:

20 minutes minimum

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

Lap Shear, Steel to Steel:	1,450 psi	ASTM D1002
Lap Shear, Aluminum to Aluminum:	1,200 psi	ASTM D1002
Tensile Strength:	2,100 psi	ASTM D638
Shore D Hardness @ 24 hrs:	78	ASTM D2240
Shrinkage:	0.35%	LTM 855.0084

Directions for Use

SURFACE PREPARATION:

- Wash with an appropriate VOC compliant product for removal of surface contaminants.
- **For steel repairs:** Sand the damaged area and immediate surrounding area with grade 40 or grade 80 grit abrasive to remove damaged coatings. Grind low areas and welds with grade 50 Roloc™ disc. Blow off with clean, dry compressed air, and re-clean the area using 3M™ VOC compliant product(s) for adhesive removal, degreasing, cleaning or removal of surface contaminants.
- **For composite plastic repairs:** Follow composite plastic repair guidelines when repairing SMC or fiberglass panels always properly reinforce high stress areas and cracks that extend through the panel. (See 3M AC&S application guide at 3M.com/automotive.) Apply 3M™ Reinforced Filler following general repair procedures below.

3M™ Reinforced Filler

05877

Directions for Use (continued)

PRODUCT PREPARATION:

INSTALLING THE CARTRIDGE

- Position large diameter cylinder in the up (12 o'clock) position.
- Place the mounting flange end of the cartridge against the mounting plate of the dispenser, making sure to align and insert the cartridge drive rod with the dispenser drive socket, located in the center of the dispenser mounting plate.
- Press the cartridge back against the mounting plate (this should occur without resistance if drive rod is aligned properly) and twist until the cartridge locks into place.

EQUALIZING THE CARTRIDGE (*always equalize prior to installing nozzle*)

- Attach an air line to the dispenser inlet.
- Set air pressure at 90 - 120 PSI and attach air hose to the applicator. Set the applicator regulator at 2 -2.5 revolutions clockwise from a closed position. (See DMS applicator instructions for further details.)
- Remove the sealing cap from the cartridge and depress the applicator trigger dispensing a small amount of material onto a disposable surface until both sides of the dual-component material are present at the cartridge outlets.

INSTALLING THE NOZZLE

- Align the 3M™ Dynamic Mixing Nozzle with the cartridge outlets, making sure to position the large outlet (cartridge) with the large inlet (nozzle) and the small outlet (cartridge) with the small inlet (nozzle).
- Press in until locking retainer engages mixing nozzle.

GENERAL REPAIR PROCESS:

DISPENSING TECHNIQUES

- Material may be dispensed directly onto the damaged area, or onto a non-porous surface, such as a spreader or a mixing board.
- Immersing the nozzle in the puddle of material eliminates any air entrapment during dispensing.
- Proceed with application method (ie. spreading) as desired.
- You may continue to dispense material until the normal material curing process clogs the mixing nozzle – typically after 2-3 minutes without depressing the trigger. If more repair material is desired after curing has occurred, remove and install a new nozzle.

CAUTION: Be sure to replace nozzles containing fully or semi cured material to prevent damage to cartridge or nozzle or personal injury. Dispose of uncured material in an approved receptacle.

Applications

Designed to be used as a reinforcement material during the repair of holes, cracks, or tears in metal, SMC, and fiberglass panels. 3M™ Reinforced Filler offers excellent sag resistance and high build and gap spanning characteristics.

3M™ Reinforced Filler

05877

Storage and Handling

HANDLING

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. Keep container capped with the used nozzle when not in use. Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial or professional use only. Avoid eye contact with dust or airborne particles.

STORAGE

Store in a dry area at 65- 80°F (18-27°C) for optimal shelf life. Shelf life: 12 months from date of manufacture.

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.

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 and Roloc are trademarks of 3M Company.
Printed in U.S.A.
©3M 2017 P.N. 05877 (6/17)