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Technical Data Sheet 05850

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3M™ Dent Filling Compound PN05850

Data Sheet

3M Part No.(s)	3M Part Descriptor (s)
05850	3M™ Dent Filling Compound

3M Fax on Demand Identification Number : 05850

Description

3M™ Dent Filling Compound (PN 05850) is intended to be used as an auto body repair material. This polyester filler is capable of repairing imperfections such as dents in steel and aluminum, and as a finishing material over properly reinforced cracks in SMC and Fiberglass. 3M™ Dent Filling Compound (PN 05850) is designed to be used with the 3M™ Dynamic Mixing Gun (PN 05846).

Features, Advantages, Benefits

Features	300ml cartridge system 50:1 mix ratio Automatic hand held dispensing system
Advantages	Air free mixing and application correct mix ratio, no variation minimal waste, direct application
Benefits	Pin hole free repairs, saves time and materials Trouble free repeatable performance Material and time savings

Typical Physical Properties

Container	Two Part Cartridge	Two Part Cartridge
Base	Polyester resin with styrene monomer	Benzoyl peroxide
Density lbs/Gallon (Appx.)	9.3 lbs/gallon	10 lbs/gallon
Color	Gray/white	Blue
Flash Point - °F	80F	
Viscosity (CPS) Brookfield Viscometer	96,000 - 172,000 cps	70,000 - 150,000 cps
Consistency	viscous paste	Viscous paste
Service Temperature - °F	-20F to 180F	N/A
Application Temperature - °F	45F to 180F	

Product Uses

3M™ Dent Filling Compound (PN 05850) is intended to be used as an auto body repair material. This polyester filler is capable of repairing imperfections such as dents in steel and aluminum, and as a finishing

material over properly reinforced cracks in SMC and Fiberglass. 3M™ Dent Repair Compound (PN 05850) may also be used for industrial and architectural surfaces needing minor surface repairs.

Performance Properties

The following times have been determined with ambient air temperature and substrate temperature @ 70°- 75° F and are considered typical values.

WORK TIME:

3-4 minutes

MIX NOZZLE DWELL TIME:

2-3 minutes

SAND TIME:

15-20 minutes

PAINT TIME:

45 minutes

Over lap shear:

880 PSI

Tensile:

1300 PSI

Elongation:

2%

Shrinkage:

0%

Handling and Application Information

Directions for Use

SURFACE PREPARATION:

Use appropriate 3M VOC compliant product(s) for adhesive removal, degreasing, cleaning or removal of surface contaminants. Reference the 3M Automotive Aftermarket Catalog for a suitable VOC compliant product. Sand the damaged area and immediate surrounding area with grade 40 or grade 80 grit DA abrasive to remove damaged coatings, grind low areas with (grade 50 Roloc™ disc) blow off with clean dry compressed air. Apply 3M™ Dent Repair Compound (following general repair procedures below) For best results see 3M™ Dent Repair System for details @ (3M.com/automotive)

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.

INSTALLING THE NOZZLE

- Remove sealing cap from cartridge
- 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.

EQUALIZING THE CARTRIDGE

- Attach an air line to the dispenser inlet.
- Using proper air pressure settings (see Cautions and Safety Items above) and a disposable collection point, depress the trigger until both sides of the dual-component material are present and the product has achieved a

consistent light blue color. This serves to “equalize” both sides of the cartridge.

**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.
- Maximum finished thickness should not exceed ¼ inch

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

3M™ Dent Filling Compound (PN 05850) is intended to be used as an auto body repair material. This polyester filler is capable of repairing imperfections such as dents in steel and aluminum, and as a finishing material over properly reinforced cracks in SMC and Fiberglass. It may be applied on properly prepared steel, aluminum, and cured automotive paint surfaces.

Storage and Handling

Store unopened cartridges in an approved area, prevent exposure to flame, sparks, or high temperatures. Store previously opened cartridges with the used nozzle in place in an approved area prevent exposure to flame, sparks, or high temperatures. Use caution not to damage outlets or drive shaft during storage or installation. Optimum storage temperatures 65° – 80° F, elevated storage temperatures reduce product shelf life.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product . 05850

Country
US

This document is public . It may be distributed .

Warranty and Limited Remedy

This product will be free from defects in material and workmanship at the time of shipment 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If this product is defective, your exclusive remedy and 3M's and seller's sole obligation shall be, at 3M's option, to replace the product or refund the purchase price.

LIMITATION OF LIABILITY : 3M and seller will not be liable for any loss or damage arising from this 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

3M Automotive Aftermarket Division
3M Center , Building 223-6N-01
Saint Paul, MN 55144-1000
1-877-666-2277 (1-877-MMM-CARS)

Material Safety Data Sheets and Technical Data Sheets are also available by calling Fax on Demand 1-800-305-0419.
Help Line 1-800-621-5455 (US) 1-650-596-4407 (International).

3M Fax on Demand /MSDS Identification Number 05850

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