

Effective: 09/11/2020 Supersedes: First issue

# Automotive Aftermarket Division 3M™ Structural Plastic Adhesive

#### 1) Part Numbers

55047 3M™ Structural Plastic Adhesive

#### 2) Description and end uses

Two-part urethane adhesive in a 200 ml cartridge, designed for bonding, back side reinforcing and some cosmetic filling of many plastic parts. Bonds to plastic, fiberglass, ceramic, metal and most substrates.

3M<sup>™</sup> Structural Plastic Adhesive has been formulated for the professional user only. It is self-mixing, fast setting, easy to use and sand and over paintable to allow invisible repairs.

### 3) Physical Properties

Delivery form Sealed bag around 200 ml duo-cartridge

containing urethane material (B) and hardener (A)

Colour Urethane: Black

Hardener: clear

Mixed material: Black Zero - 100% solids

VOC content Zero - 100% solids
Consistency Flowable paste before curing

Application +15°C to +30°C

temperature

Storage Conditions +5°C to +35°C in well ventilated area

Shelf life 12 months from date of manufacture under normal

storage conditions in original sealed bag



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#### 4) Directions for Use

Work Life 50 seconds
Sanding time 15 mins
Painting time 30 mins
Full Cure 1 hour

Two-side repair (i.e. bumper crack)

- 1) Drill a hole at the end of the crack or broken area to prevent further tearing
- 2) Clean the work piece thoroughly with soap and water, followed by 3M VHB Cleaner on a clean 3M 34567 Panel wipe
- 3) Clean sand the area around the crack to provide a suitable surface for the adhesive, shape the edges of the crack to a V-shape, feather into the surrounding area to remove all paint where adhesive may be applied.
- 4) Remove all dust and clean the area again with 3M VHB Cleaner
- 5) Start working at the inside of the work piece: Apply a light coat of 3M 05917 Polyolefin Adhesion Promoter and allow to dry for 10 mins
- 6) Prepare the 55047 cartridges by removing the seal of the cartridge. Insert the cartridge into the 08117 manual gun and extrude a small amount of adhesive, be sure that both parts of the adhesive are extruded prior to attaching the mixing tip. Next attach the mixing tip and extrude a small amount of adhesive through the mixing tip.
- 7) Take 3M 04904 Reinforcement tape and cut off an appropriately sized piece for the length of the crack.
- 8) Dispense 55047 material onto the tape to fill the crack and press the tape and material onto the crack within 50 secs from application, working the material into the crack and levelling it out.

To increase the strength of the repair, step 8 & 9 can be repeated to obtain multiple layers of 04904 reinforcement tape and 55047 adhesive

- 9) Allow the adhesive to cure for 15 mins
- 10) Go to the front side of the repair and clean sand the area around the crack to provide a suitable surface for the adhesive



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- 11) Apply a thin film of 05917 Polyolefin adhesion promoter onto the repair area and let dry for 10 mins
- 12) Fill the crack at the front side with either 05887 Plastic filler or 05901 FPRM material and level it out with a spreader, then allow the material to cure for 20 mins
- 13) Sand the area using first P80, followed by P180
- 14) Seal, prime and paint according to paint manufacturer's recommendations.

CAUTION: Do not apply polyester fillers or putties directly over this product.

### 5) Storage

Store the product from +5°C to +35°C in well ventilated area

### 6) Safety

3M™ Structural Plastic Adhesive PN55047 is designed FOR PROFESSIONAL USE ONLY.

Read full instructions and material safety data sheet before use.

IMPORTANT: This product contains hazardous materials and therefore appropriate personal protective equipment should always be used. Please refer to the label and consult the material safety data sheet for full handling instructions and personal protection information. These are available via your stockist. The supplier disclaims any liability where the user does not wear the recommended personal protective equipment.

## 7) Disclaimer

All statements, technical information and recommendations are based on tests we believe to be reliable as at the date of hereof, but the accuracy or completeness thereof is not guaranteed. Please ensure before using the product that it is suitable for your intended use. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, other than for fraudulent misrepresentation, 3M expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.



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