Semi-Rigid Parts Repair - 3

08237

Technical Data Sheet **June, 2011**

3M Part No.(s)	3M Part Descriptor(s)
08237	3M™ Semi-Rigid Parts Repair - 3

Product Description 3M™ Semi-Rigid Parts Repair - 3 is a two-part urethane adhesive used to repair semi -rigid and flexible plastics such as Xenoy, RRIM, GTX, PPO, ABS, as well as a variety of other plastics. 3M™ Semi-Rigid Parts Repair - 3 is an excellent choice for medium sized repairs and reinforcement of two sided damage because of its medium length work time and high bond strength.

Features

- Two-part urethane chemistry
- 200 ml dual-syringe cartridge
- 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	Urethane
Density lbs/Gallon (Appx.)	10.7 / 10.2
Color	White / Black
Flash Point - °F	>200°F
Viscosity (CPS) Brookfield Viscometer	12,000 - 20,000
Solids Content (Appx.)	100%
Consistency	Paste
Service Temperature - °F	-20°F to 180°F

Product Uses

Two-part urethane used to repair semi rigid plastics such as Xenoy, RRIM, GTX, PPO, ABS, as well as a variety of other types. Longer work time for larger area reinforcement repairs. For best results use in conjunction with **3M™ Polyolefin Adhesion Promoter (PN 05907)** when repairing polyolefin type plastics.

Use with the following applicators: PN 08117 (manual), PN 08571 (manual), and PN 09930 (pneumatic).
3M™ Mix Nozzle PN 08193 (6/bag), PN 8194 (50/box).
Note: Do not apply polyester body filler directly to this product.
Note: Use with 3M™ Reinforcement Tape PN 04904 when reinforcing repairs.

3M™ Semi-Rigid Parts Repair - 3
08237

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:
3 hours

MIX NOZZLE DWELL TIME:
1.5 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.

Lap Shear, SMC	1185 PSI	ASTM D1002 / 2" per minute
Lap Shear, FRP	771 PSI	ASTM D1002 / 2" per minute
Lap Shear, TPO	263 PSI	ASTM D1002 / 2" per minute
Lap Shear, PP	232 PSI	ASTM D1002 / 2" per minute
Lap Shear, TEO	190 PSI	ASTM D1002 / 2" per minute

Overlap shear test method: Overlap 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". Plastics cleaned with 3M General Purpose Adhesive Cleaner PN 08984 and DA sanded with P80 abrasive. Thermopolyolefin and Polypropylene plastics coated with 3M Polyolefin Adhesion Promoter PN 05907.

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 or P180 abrasive.
3. Remove dust from surface using clean, un-oiled compressed air and a clean, dry rag.
4. **Apply 3M™ Polyolefin Adhesion Promoter (PN 05907) following label directions.**

3M™ Semi-Rigid Parts Repair - 3
08237

Directions for Use ***(continued)***

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.
4. Attach 3M™ Mixing Nozzle (PN 08193) to cartridge and lock in place with retaining collar.

CAUTION: *Before proceeding with next step have all parts accessible and ready for repair.*

5. Dispense a small amount of material and discard.

GENERAL REPAIR PROCESS:

1. Apply adhesive to one of the parts and assemble the parts immediately.
2. Hold parts together for 2 to 3 minutes.

NOTE: Allow to cure 1 hour before putting repaired part into service.

APPLICATION WARNINGS:

Do not apply polyester fillers or putties over this product.

CLEAN-UP:

Remove excess PN08237 prior to complete cure by using an appropriate VOC compliant adhesive remover suitable for most surfaces, such as 3M™ Specialty Adhesive Remover (PN38984 / PN38987).Reference the 3M Automotive Aftermarket Catalog for a suitable VOC compliant product.

Applications

For use as a reinforcement and bonding adhesive for many semi-rigid and flexible plastics.

Storage and Handling

HANDLING
Avoid contact with water to prevent potentially violent reaction or fire. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. Avoid eye contact with vapors, mists, or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining.

STORAGE
When stored at the recommended conditions in original, unopened containers, this product has a shelf life of 12 months from the date of manufacture. Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area.

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

3M™ Semi-Rigid Parts Repair - 3
08237

Precautionary Information	Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product. Hazardous polymerization may occur. May cause allergic skin reaction. May cause allergic respiratory reaction. Contains a chemical or chemicals which can cause cancer.
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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This is the last page