



Semi-Rigid Plastic Repair

04240

Technical Data Sheet

May, 2011

3M Part No.(s)	3M Part Descriptor(s)
04240	3M™ Semi-Rigid Plastic Repair

Product Description 3M™ Semi-Rigid Plastic Parts Repair is a two part urethane adhesive designed for bonding or back side reinforcing of many plastic parts. This formula provides a quick set up time and good internal strength needed for reinforcing and bonding of plastic parts. For best results use in conjunction with 3M™ Polyolefin Adhesion Promoter (PN 05907) when repairing low surface energy plastics such as TPO, PP, and ABS.

- Features**
- Urethane Chemistry
 - 200 ml Dual-Syringe Cartridge System
 - Quick Handling Strength

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	Part B
Container	200 ml Dual-Syringe Cartridge	
Base/Accelerator	Urethane	
Density lbs/Gallon (Appx.)	8.8	9.2
Color	Black	Clear
Solids Content (Appx.)	100%	
Consistency	Liquid	
Solvent	None	
Service Temperature - °F	-20 to 180°F	

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Product Uses

For repair or bonding where a durable, semi-rigid material and a fast set time are needed. Bonds to plastic, fiberglass, ceramic, metal and most substrates.

Use with the following applicators: (PN 08571, PN 08117 (manual), PN 09930 (pneumatic)).

Mix nozzle (PN 08193).

Adhesion promoter (PN 05907).

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:

50 seconds

MIX NOZZLE DWELL TIME:

30 seconds

SAND TIME:

15 minutes

CLAMP TIME:

1 hour

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, TPO	267.26 PSI	ASTM D1002 / 2" per minute
Lap Shear, PP	228.9 PSI	ASTM D1002 / 2" per minute
Lap Shear, TEO	201.74 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". 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.

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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 80 or 180 abrasive.
3. Remove dust from surface using clean, un-oiled compressed air and a clean, dry rag.
4. **Apply 3M™ Automix Polyolefin Adhesion Promoter (PN 05907) following label directions.**

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: Parts A and B of this product are very runny prior to mixing. It is recommended that you extrude the material with the dispensing end of the cartridge facing upward, into a paper towel. Continue to hold the cartridge in this position until you have completed the next step (4).
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:

Unmixed material may be cleaned from most surfaces with an appropriate 3M VOC compliant product for removal of surface contaminants. Reference the 3M Automotive Aftermarket Catalog for a suitable VOC compliant product.

Applications

Bonding and reinforcing (use with 3M™ PN 04904 Reinforcing Tape) of plastic parts. May used on properly prepared SMC, fiberglass composites and non-structural metal that has been coated with a primer.

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Storage and Handling

HANDLING

Avoid eye contact with vapors, mists, or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

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. Keep container in well-ventilated area

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

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product. May cause allergic skin reaction. May cause allergic respiratory reaction. Always wear gloves, eye protection, appropriate particulate respiratory protection, and work in a well-ventilated 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.

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For Additional Health and Safety Information



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