



TPO Plastic Parts Repair

08239

Technical Data Sheet

February, 2012

3M Part No.(s)	3M Part Descriptor(s)
08239	3M™ TPO Plastic Parts Repair

Product Description 3M™ TPO Plastic Parts Repair is a two-part urethane used to repair thermoplastics such as TPO, PP, PE, ABS, EPDM, and a variety of other plastics. 3M™ TPO Plastic Parts Repair is an excellent choice for small sized repairs and reinforcement of two sided damage because of its fast work time and high bond strength. 3M™ TPO Plastic Parts Repair is used in conjunction with 3M™ Polyolefin Adhesion Promoter PN 05907 for increased bond adhesion.

- 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

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Product Uses

3M™ TPO Plastic Parts Repair is a two part urethane adhesive designed for bonding and back side reinforcing flexible and semi rigid plastic parts. 3M™ TPO Plastic Parts Repair is recommended to be used in conjunction with 3M™ EZ Sand Flexible Parts Repair Material PN 05887 for a complete repair system for plastic parts requiring cosmetic finishing and painting. 3M™ TPO Plastic Parts Repair is used in conjunction with 3M™ Polyolefin Adhesion Promoter PN 05907 for increased bond adhesion. Do not apply polyester repair products such as body filler or glaze over 3M™ TPO Plastic Parts Repair.

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.

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:

20 seconds

SAND TIME:

30 minutes

CURE 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	464 PSI	ASTM D1002 / 2" per minute
Lap Shear, PP	498 PSI	ASTM D1002 / 2" per minute
Lap Shear, TEO	322 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™ 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.
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:

Prior to curing, 3M™ TPO Plastic Parts Repair 08239 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

See “Product Uses” on page 2.

Storage and Handling

HANDLING

Contents may be under pressure, open carefully. Avoid eye contact with vapors, mists, or spray. Avoid skin contact. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. 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. Keep container in well-ventilated area. Store away from heat. Store out of direct sunlight. Store away from acids. Store away from strong bases.

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

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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. Always wear gloves, eye protection, appropriate 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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