

# Fusor<sup>®</sup> T21 Composite Adhesive (Slow)

## Technical Data Sheet

Fusor<sup>®</sup> T21 adhesive is a two-component, epoxy-based adhesive used for repair or bonding of composite body panels including large assembly bonding of fairings, body panels, spoilers, ground effects, wind deflectors, roofs and fender liners.

Fusor T21 adhesive can also be used to repair cracks, punctures and tears.

### Features and Benefits:

**High Performance** – provides high strength and excellent gap-filling properties.

**Versatile** – bonds composite plastics, including substrates such as fiberglass, SMC, carbon fiber, FRP, RTM, Metton<sup>®</sup>, and GTX; bonds primed metals.

**Convenient** – one product bonds and finishes all plastic panels; great for heavy-duty truck repair.

### Application:

**Prepare** – Tape off exposed fibers to avoid wicking cleaner into the substrates. Clean the area to be repaired with Fusor 703 adhesion prep/cleaner.

Make a backing patch if the part is cracked or punctured all the way through. This patch can be made from Fusor 702 fiberglass cloth and Fusor 100EZ/101EZ plastic repair adhesive. It can also be made from a piece of SMC, of the same size and shape, bonded with Fusor plastic repair adhesive (see Figure 1).

Make sure the back of the damaged part is clean and thoroughly sanded with 80-grit sandpaper.

From the front of the repair area, dish out and taper the area all the way to the bottom of the damage, leaving no square edges in the repair area (see Figure 2).

**Apply** – Load the cartridge into the applicator and remove the end cap. Level the plungers by expelling a small amount of adhesive to ensure that material is coming out of both sides of the cartridge. Attach mixing tip and dispense a mixer length of adhesive to verify the material is evenly mixed.

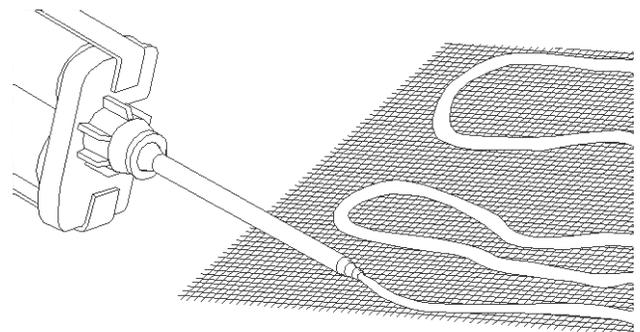


Figure 1. Create Backing Patch

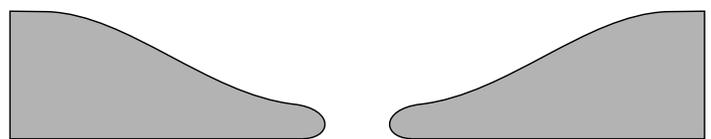


Figure 2. Taper Repair Area

### Typical Properties\*

Appearance	Gray Paste
Base Chemistry	Epoxy
Work Time	45 minutes @ 70°F (21°C)
Clamp Time	4 hours @ 70°F (21°C); 20 minutes @ 180°F (82°C)
Sand Time	60 minutes @ 180°F (82°C)
Paint Time	60 minutes @ 180°F (82°C)
Cure Time	60 minutes @ 180°F (82°C)

\*Data is typical and not to be used for specification purposes.



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Use a piece of plastic film backing, supplied with Fusor 702 fiberglass cloth, as the base. Prepare the filler patch, which consists of multiple layers of Fusor fiberglass cloth sandwiched between alternate layers of Fusor plastic repair adhesive. Layer the cloth and adhesive to fill the repair area (see Figure 3).

Place filler patch in the repair area. Use Fusor 704 saturation roller to press the material into the repair area and force out entrapped air.

After rolling the repair with the saturation roller, heat set the repair with a heat gun or heat lamp for 15-20 minutes at 180°F (82°C). Remove plastic film backing from repair area and rough-sand.

Note: Various applications, cleaners/solvents and coatings may not be compatible with this product and should be tested by the user before proceeding with intended repair procedure.

**Finish** – Apply a finish coat of Fusor plastic repair adhesive if needed. Heat cure the entire repair area for one hour at 180°F (82°C). Allow repair area to cool to room temperature before final sanding. Prime and paint per manufacturer's recommendations.

For more application information, refer to [www.lord.com/fusor](http://www.lord.com/fusor) for standard operating procedures or application training videos.

## Shelf Life/Storage

Shelf life is 24 months from date of manufacture when stored at 75°F (24°C) in original, unopened container.

## Cautionary Information:

Before using this or any Parker LORD product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

*For industrial/commercial use only.* Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

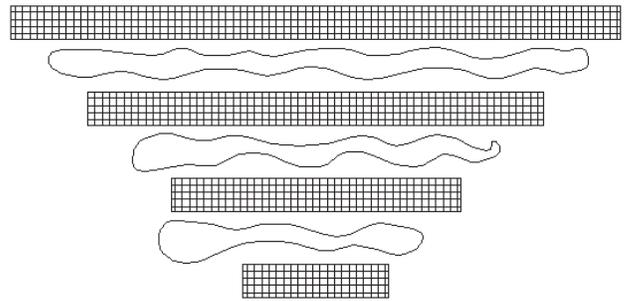


Figure 3. Filler Patch

## Durability Performance\*

Lap Shear Strength ASTM D 1002	
SMC	fiber tear
SBR	substrate failure
Primed Cold Rolled Steel	>1600 psi (11.0 MPa)
Aluminum	> 2500 psi (17.2 MPa)

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## Fusor® Repair Products Lifetime Guarantee\*

LORD Assembly & Protection Solutions Division of Parker-Hannifin Corporation ("Parker LORD") guarantees to the user that Fusor® Repair Products (adhesives, primers, seam sealers and foams only), when used in strict accordance with Parker LORD application and use instructions, will provide a durable repair for the life of the vehicle per the product's technical data sheet. The user is solely responsible for determining the Fusor product and application method for the repair. Application and product guidance can be found on Fusor.com.

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This guarantee shall only apply to the above referenced Fusor products sold by Parker LORD on or after January 1, 2001.

Fusor Metal Bonding Adhesives shall only be used for the adhesive-only bonding (no welds or rivets) of metal to metal assemblies (steel or aluminum) in full or partial panel replacements of door skins, roof skins, quarter panels, rear body panels and other outer body sheet metal where approved by the vehicle manufacturer.

Fusor products shall not be used for adhesive-only bonding of any structural component unless specifically recommended by the vehicle manufacturer. Structural panels must be replaced in strict compliance with vehicle manufacturer guidelines. If in doubt as to what is a structural component or the proper installation method, contact the vehicle manufacturer. Further, any Fusor products used in marine composite repair, such as with personal water craft and the like, shall be limited to repairs above the water line.

If you have any questions or need to receive proper use instructions, contact the Parker LORD Customer Support Center at +1 800 234 Fusor (3876) or visit Fusor.com.

**To comply with the requirements of the Fusor Repair Products Lifetime Guarantee, attach a copy of this completed page to the repair record, and retain with your files:**

**Vehicle Make/Model:** \_\_\_\_\_

**Vehicle Identification Number:** \_\_\_\_\_

**Fusor Product(s) Used for Repair:** \_\_\_\_\_

**Lot Number(s) on Cartridge(s) Used for Repair:** \_\_\_\_\_

*\*This guarantee is void if product is used after the date printed on the cartridge label. Parker LORD Terms and Conditions of Sale shall apply to all sales of Fusor products.*



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Instructions contained in this document need to be followed to qualify for the LORD Fusor Lifetime Guarantee. Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

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