

Effective: 03/4/16 Supersedes: 1/11/05

## **Automotive Aftermarket Division**

## **3M 55045 Superfast Plastic Adhesive**

### 1) Part Numbers

55045 - Superfast plastic adhesive - 50ml cartridges

### 2) Description and end uses

3M Automix<sup>™</sup> 55045 Superfast Plastic Adhesive is a very fast setting two components adhesive designed to allow fast, simple and durable repairs of damaged automotive plastic parts. Used in conjunction with 3M 04903 Contour Sheet, it allows to completely rebuild broken plastic pieces like tabs on lamps or bumpers, interior trims, plastic covers in engine compartment, etc. Products cures within minutes then can be grinded, drilled and cut to reproduce the original shape of the broken tab or piece, even when the broken piece is missing.

## 3) Physical Properties

Base	:	Liquid Urethane
Consistency	:	Semi-rigid paste after curing.
Color	:	Clear
voc	:	<=10 g/l
Flash Point	:	143 °C
Temperature resistance	:	-40 to +120°C
Temperature of application	:	+15°C to +30°C
Work Life	:	20 seconds
Tack Free time	:	30 seconds
Full cure	:	1 hour
Hardness (Shore D)	:	70

- Two components adhesive in cartridge: no additional product like a separated accelerator. Automatic, easy and safe mixing in the mixing nozzle.



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- Urethane technology: does not sag or run, easy to shape with 3M 4903 contour sheet. Does not become brittle like cyanoacrylate adhesives and makes durable repairs.
- 20 to 30 seconds bond time: allow very fast repairs. No need to use clamps or other additional system to maintain parts together.
- Hardness achieved within minutes: can be sanded, cut, and drilled few minutes after application. Allow to rebuild and attach parts in a few minutes.
- Versatile adhesive: bond to most plastics (in conjunction with 3M 05917 adhesion promoter for TPO). Also bond metal, wood, glass (use glass adhesion promoter for optimum results).

## 4) Directions for Use

Example for a tab repair rebuilding when the broken piece is missing.



#### 1. Clean part

- Clean and degrease the bonding surface with 3M 22779 VHB Surface Cleaner.
- Allow to dry completely.



#### 2. Prepare repair area

- Sand and bevel the remaining part of the tab.
- Remove all paint from the bonding area.
- Drill several holes (diam. 3 to 6 mm) to reinforce the repair.
- Spray 3M 05917 adhesion promoter.
- Allow to dry for 10 minutes.





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#### 3. Rebuild broken tab

- Cut a piece of 3M 4903 contour film about 2.5 times the size of the tab to be repaired.
- Apply 3M 55045 adhesive, with 08190 applicator, using the contour sheet as a support.
- Immediately fold the sheet and shape adhesive with fingers. Force adhesive into the drilled holes. Do not press too hard to keep a 3 to 5mm layer of adhesive material on both side of the tab.
- <u>Caution:</u> when starting to cure, adhesive becomes hot!
- Superfast adhesive is set after 20 to 30 seconds.
- Let cool down the adhesive and peel off contour sheet.

## 4. Finish the tab repair

- After 5 to 10 minutes, 3M 55045Superfast Plastic Adhesive can be grinded, sanded, cut and drilled to restore the original shape of the broken part.
- If necessary 3M 05545 can be painted using your usual paint process for plastic parts or specific bumper paint in spray.

To bond broken piece when it is available or for any other plastic part it is recommended to drill holes on both pieces. During the repair process, force adhesive into the holes to add mechanical resistance to the repair.

<u>Note</u>: for small broken piece, if the shape is quite simple, it is often easier, faster and more durable to rebuild the part instead or trying to bond the broken piece.

#### **Products Guide**

Description	Part N°	Size
Automix™ Superfast Plastic Adhesive	55045	50ml cartridge
Mixing nozzles for 55045	04908	Box of 50
Automix™ Contour Sheet	04903	100mm x 3m roll
Polyolefin Adhesion Promoter	05917	200ml spray
VHB Surface Cleaner	22779	1l bottle
Manual gun + plunger for 50ml cartridges	08190	-



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### 5) Storage

**Storage conditions** : +5°C to +35°C.

**Shelf life** : 9 months from date of manufacture under normal

storage conditions in original closed bag.

## 6) Safety

Wear appropriate safety equipment, such as chemical resistant gloves, safety glasses or other protective equipment required by your local regulations or company rules.

Please refer to the Material Safety Data Sheet or contact your local 3M Toxicology Department before using the product.

3M 55045 Superfast plastic Adhesive is designed FOR PROFESSIONAL INDUSTRIAL USE ONLY.

### 7) Disclaimer

All statements, technical information and recommendations are based on tests we believe to be reliable but the accuracy or completeness thereof is not guaranteed. Please ensure before using our product that it is suitable for your intended use. All questions of reliability relating to this product are governed by the Terms of Sale subject, where applicable, to the prevailing law.



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#### For Additional Health and Safety Information

#### **Denmark**

3M a/s Automotive Aftermarket Hannemanns Allé 53 2300 København S Tel: 43 48 01 00

3mkundeservicedk@mmm.com www.3MAuto.dk

#### **Norway**

3M Norge AS
Automotive Aftermarket
Kanalveien 2
2004 Lillestrøm
Telefon: 06384
www.3m.no/auto
kundeservice@mmm.com

#### **Finland**

Suomen 3M Oy
Automotive Aftermarket
Keilaranta 6
02150 Espoo
Tel: 09 5252 1
tilaukset@mmm.com
www.3M.fi/autotuotteet

#### Sweden

3M Svenska AB
Automotive Aftermarket
Bileftermarknad
19189 Sollentuna
Tel. 08-922100
kundservice@mmm.com
3M.se/bileftermarknad