



# Reinforced Filler

## 05877

### Technical Data Sheet

3M Part No.(s)	3M Part Descriptor(s)
05877	3M™ Reinforced Filler

**Product Description** 3M™ Reinforced Filler PN 05877 is a two component, resin rich filler formula, containing milled fiberglass and packaged in a 300 ml Dual Cartridge System. 3M™ Reinforced Filler PN 05877 offers excellent adhesion to steel, galvanized steel, aluminum, E-coat, sheet molded compound (SMC), fiberglass (FRP), concrete and wood substrates, and provides additional strength when deeper fill and gap spanning capability is needed. 3M™ Reinforced Filler PN 05877 is designed to be used with the 3M™ Dynamic Mixing applicator (PN 05846).

- Features**
- 276 ml Dual Cartridge System
  - 50:1 mix ratio
  - Milled Fiberglass
  - Water resistant

### 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 - Filler	Part B - Hardener
<b>Container</b>	Two Part Cartridge - (300ml)	Two Part Cartridge - (6ml)
<b>Base</b>	Polyester Resin with Styrene Monomer	Benzoyl Peroxide
<b>Density lbs/Gallon (Appx.)</b>	13.6 lbs/gallon	10 lbs/gallon
<b>Color</b>	Green	Blue
<b>Flash Point</b>	89°F (31°C)	N/A
<b>Viscosity</b>	1,000,000 -1,400,000 cps	N/A
<b>Consistency</b>	Highly viscous paste	Viscous paste
<b>Service Temperature</b>	Min. -20°F (-29°C) Max. 180°F (82°C)	N/A
<b>Application Temperature</b>	Min. 60°F (15°C) Max. 110°F (43°C)	N/A

# 3M™ Reinforced Filler

05877

---

## Product Uses

3M™ Reinforced Filler PN 05877 is designed to be used as a reinforcement material when repairing holes, cracks or tears in metal, sheet molded compound (SMC), and Fiberglass (FRP) panels. 3M™ Reinforced Filler should be used in conjunction with proper reinforcing products and repair procedures. When used properly it offers excellent sag resistance and high build and gap filling characteristics increasing repair strength and reducing application of traditional body filler.

**For professional use only. Not intended for retail sale.**

---

## Typical Performance Properties

The following times have been determined with ambient air temperature and substrate temperature @ 72°F (22°C) and are considered typical values.

### WORK TIME:

3 to 4 minutes

### SANDING TIME:

20 minutes minimum

**Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.**

Lap Shear, Steel to Steel:	1,450 psi	ASTM D1002
Lap Shear, Aluminum to Aluminum:	1,200 psi	ASTM D1002
Tensile Strength:	2,100 psi	ASTM D638
Shore D Hardness @ 24 hrs:	78	ASTM D2240
Shrinkage:	0.35%	LTM 855.0084

---

## Directions for Use

### SURFACE PREPARATION:

- Wash with an appropriate VOC compliant product for removal of surface contaminants.
- **For steel repairs:** Sand the damaged area and immediate surrounding area with grade 40 or grade 80 grit abrasive to remove damaged coatings. Grind low areas and welds with grade 50 Roloc™ disc. Blow off with clean, dry compressed air, and re-clean the area using 3M™ VOC compliant product(s) for adhesive removal, degreasing, cleaning or removal of surface contaminants.
- **For composite plastic repairs:** Follow composite plastic repair guidelines when repairing SMC or fiberglass panels always properly reinforce high stress areas and cracks that extend through the panel. Apply 3M™ Reinforced Filler following general repair procedures below.

# 3M™ Reinforced Filler

05877

---

## Directions for Use (continued)

### PRODUCT PREPARATION:

#### INSTALLING THE CARTRIDGE

- Position large diameter cylinder in the up (12 o'clock) position.
- Place the mounting flange end of the cartridge against the mounting plate of the dispenser, making sure to align and insert the cartridge drive rod with the dispenser drive socket, located in the center of the dispenser mounting plate.
- Press the cartridge back against the mounting plate (this should occur without resistance if drive rod is aligned properly) and twist until the cartridge locks into place.

#### EQUALIZING THE CARTRIDGE (*always equalize prior to installing nozzle*)

- Attach an air line to the dispenser inlet.
- Set air pressure at 90 - 120 PSI and attach air hose to the applicator. Set the applicator regulator at 2 -2.5 revolutions clockwise from a closed position. (See DMS applicator instructions for further details.)
- Remove the sealing cap from the cartridge and depress the applicator trigger dispensing a small amount of material onto a disposable surface until both sides of the dual-component material are present at the cartridge outlets.

#### INSTALLING THE NOZZLE

- Align the 3M™ Dynamic Mixing Nozzle with the cartridge outlets, making sure to position the large outlet (cartridge) with the large inlet (nozzle) and the small outlet (cartridge) with the small inlet (nozzle).
- Press in until locking retainer engages mixing nozzle.

### GENERAL REPAIR PROCESS:

#### DISPENSING TECHNIQUES

- Material may be dispensed directly onto the damaged area, or onto a non-porous surface, such as a spreader or a mixing board.
- Immersing the nozzle in the puddle of material eliminates any air entrapment during dispensing.
- Proceed with application method (ie. spreading) as desired.
- You may continue to dispense material until the normal material curing process clogs the mixing nozzle – typically after 2-3 minutes without depressing the trigger. If more repair material is desired after curing has occurred, remove and install a new nozzle.

**CAUTION:** Be sure to replace nozzles containing fully or semi cured material to prevent damage to cartridge or nozzle or personal injury. Dispose of uncured material in an approved receptacle.

---

## Applications

Designed to be used as a reinforcement material during the repair of holes, cracks, or tears in metal, SMC, and fiberglass panels. 3M™ Reinforced Filler offers excellent sag resistance and high build and gap spanning characteristics.

# 3M™ Reinforced Filler

05877

---

## Storage and Handling

### HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep out of the reach of children. Keep container capped with the used nozzle when not in use. Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial or professional use only. Avoid eye contact with dust or airborne particles.

### STORAGE

Store in a dry area at 65- 80°F (18-27°C) for optimal shelf life. Shelf life: 12 months from date of manufacture.

---

## Precautionary Information

Before using this product, please reference Product Label and/or Safety Data Sheet for Health and Safety Information. Note: Laws controlling the acceptable amounts of Volatile Organic Compounds (VOC's) vary by state, and in some cases by locality. For surface preparation and clean-up activities, consult federal, state and local regulations regarding use of products containing VOCs in your 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.

---

## Limitation of Liability

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.





## Safety Data Sheet

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

### Product identifier

3M™ Reinforced Filler PN 05877

### ID Number(s):

60-4550-6631-0, 60-4550-7348-0, 60-4550-7349-8

### Recommended use

Automotive

### Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Automotive Aftermarket

**This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:**

37-4241-8, 26-9610-2

**DISCLAIMER:** The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3 M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

---



## Safety Data Sheet

Copyright, 2018, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

**Document Group:** 37-4241-8 **Version Number:** 1.03

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Blue Cream Hardener for DMS

#### Product Identification Numbers

LB-K100-2096-6

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Automotive, Hardener for DMS Glazes and Fillers

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Automotive Aftermarket

### SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

#### 2.1. Hazard classification

Organic Peroxide: Type E.  
Serious Eye Damage/Irritation: Category 2A.  
Skin Sensitizer: Category 1B.  
Specific Target Organ Toxicity (single exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

---

Flame | Exclamation mark | Health Hazard |

**Pictograms**



**Hazard Statements**

Heating may cause a fire.

Causes serious eye irritation.

May cause an allergic skin reaction.

Causes damage to organs:

cardiovascular system |

nervous system |

kidney/urinary tract |

respiratory system |

**Precautionary Statements**

**Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep away from clothing and other combustible materials.

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

**Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see Notes to Physician on this label).

**Storage:**

Protect from sunlight.

Store at temperatures not exceeding 32C/90F. Keep cool.

Store locked up.

Store away from other materials.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**Notes to Physician:**

This product contains ethylene glycol. If there is reasonable suspicion of ethylene glycol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the

---

## 3M™ Blue Cream Hardener for DMS

medical management.

1% of the mixture consists of ingredients of unknown acute oral toxicity.

1% of the mixture consists of ingredients of unknown acute dermal toxicity.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Benzoyl Peroxide	94-36-0	30 - 60 Trade Secret *
BENZOIC ACID, C9-11-BRANCHED ALKYL ESTERS	131298-44-7	10 - 20 Trade Secret *
Water	7732-18-5	10 - 20 Trade Secret *
Calcium Sulfate	7778-18-9	1 - 5 Trade Secret *
Ethylene Glycol	107-21-1	1 - 5 Trade Secret *
Zinc Stearate	557-05-1	1 - 5 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

##### Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

##### Eye Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

##### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

#### 4.3. Indication of any immediate medical attention and special treatment required

This product contains ethylene glycol. If there is reasonable suspicion of ethylene glycol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

#### 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode. Part of the oxygen for combustion is supplied by the peroxide itself.



**5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Contain spill. Collect as much of the spilled material as possible using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

**7.2. Conditions for safe storage including any incompatibilities**

Protect from sunlight. Store away from heat. Store at temperatures not exceeding 32C/90F. Keep cool. Keep only in original container. Store away from acids. Store away from other materials. Keep/store away from clothing and other combustible materials. Store away from amines.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Ethylene Glycol	107-21-1	ACGIH	TWA(Vapor fraction):25 ppm;STEL(Inhalable aerosol):10 mg/m <sup>3</sup> ;STEL(Vapor fraction):50 ppm	A4: Not class. as human carcin
STEARATES	557-05-1	ACGIH	TWA(inhalable fraction):10 mg/m <sup>3</sup> ;TWA(respirable fraction):3 mg/m <sup>3</sup>	A4: Not class. as human carcin
Zinc Stearate	557-05-1	OSHA	TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>	
Calcium Sulfate	7778-18-9	ACGIH	TWA(inhalable fraction):10	

**3M™ Blue Cream Hardener for DMS**

			mg/m3	
Calcium Sulfate	7778-18-9	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
Benzoyl Peroxide	94-36-0	ACGIH	TWA:5 mg/m3	A4: Not class. as human carcin
Benzoyl Peroxide	94-36-0	OSHA	TWA:5 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Nitrile Rubber

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Nitrile

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**General Physical Form:**

Solid Thick Paste

**Specific Physical Form:**

Paste

**Odor, Color, Grade:**

Blue Paste Characteristic Odor.

## 3M™ Blue Cream Hardener for DMS

Odor threshold	No Data Available
pH	No Data Available
Melting point	No Data Available
Boiling Point	No Data Available
Flash Point	No flash point
Evaporation rate	No Data Available
Flammability (solid, gas)	Organic Peroxide: Type E.
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	100 Pa [@ 20 °C]
Vapor Density	No Data Available
Density	1.16 - 1.24 g/ml [@ 20 °C]
Specific Gravity	1.16 - 1.24 [Ref Std:WATER=1]
Solubility in Water	Nil
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	50 °C [Details:SADT]
Decomposition temperature	No Data Available
Viscosity	100,000 - 300,000 centipoise
Hazardous Air Pollutants	0.069 - 0.1423 lb HAPS/lb solids [Test Method:Calculated]
Volatile Organic Compounds	<=119 g/l [Test Method:calculated SCAQMD rule 443.1]
Volatile Organic Compounds	4.9 - 9.9 [Test Method:calculated per CARB title 2]
Percent volatile	11 - 30 % weight
VOC Less H2O & Exempt Solvents	<= 157 g/l [Test Method:calculated SCAQMD rule 443.1]

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat  
Sparks and/or flames

### 10.5. Incompatible materials

Accelerators  
Alkali and alkaline earth metals  
Amines  
Reducing agents  
Strong acids

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### Inhalation:

Vapors released during curing may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

##### Skin Contact:

May be harmful in contact with skin.

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

##### Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

##### Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE2,000 - 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Benzoyl Peroxide	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg

**3M™ Blue Cream Hardener for DMS**

Benzoyl Peroxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 24.3 mg/l
Benzoyl Peroxide	Ingestion	Rat	LD50 > 5,000 mg/kg
BENZOIC ACID, C9-11-BRANCHED ALKYL ESTERS	Dermal	Rabbit	LD50 > 2,000 mg/kg
BENZOIC ACID, C9-11-BRANCHED ALKYL ESTERS	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5 mg/l
BENZOIC ACID, C9-11-BRANCHED ALKYL ESTERS	Ingestion	Rat	LD50 > 5,000 mg/kg
Ethylene Glycol	Ingestion	Human	LD50 1,600 mg/kg
Ethylene Glycol	Inhalation-Dust/Mist (4 hours)	Other	LC50 estimated to be 5 - 12.5 mg/l
Ethylene Glycol	Dermal	Rabbit	9,530 mg/kg
Calcium Sulfate	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Zinc Stearate	Dermal	Rabbit	LD50 > 2,000 mg/kg
Calcium Sulfate	Ingestion	Rat	LD50 > 5,000 mg/kg
Zinc Stearate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
Zinc Stearate	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Benzoyl Peroxide	Rabbit	Minimal irritation
Ethylene Glycol	Rabbit	Minimal irritation
Zinc Stearate	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Benzoyl Peroxide	Rabbit	Severe irritant
Ethylene Glycol	Rabbit	Mild irritant
Zinc Stearate	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
Benzoyl Peroxide	Guinea pig	Sensitizing
Ethylene Glycol	Human	Not classified

**Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity**

Name	Route	Value
Benzoyl Peroxide	In Vitro	Not mutagenic
Benzoyl Peroxide	In vivo	Not mutagenic
Ethylene Glycol	In Vitro	Not mutagenic
Ethylene Glycol	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Benzoyl Peroxide	Ingestion	Multiple animal species	Not carcinogenic

**3M™ Blue Cream Hardener for DMS**

Benzoyl Peroxide	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Ethylene Glycol	Ingestion	Multiple animal species	Not carcinogenic

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Benzoyl Peroxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring & during gestation
Benzoyl Peroxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	prematuring & during gestation
Benzoyl Peroxide	Ingestion	Not classified for development	Rat	NOAEL 500 mg/kg/day	prematuring & during gestation
Ethylene Glycol	Dermal	Not classified for development	Mouse	NOAEL 3,549 mg/kg/day	during organogenesis
Ethylene Glycol	Ingestion	Not classified for development	Mouse	LOAEL 750 mg/kg/day	during organogenesis
Ethylene Glycol	Inhalation	Not classified for development	Mouse	NOAEL 1,000 mg/kg/day	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethylene Glycol	Ingestion	heart   nervous system   kidney and/or bladder   respiratory system	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Ethylene Glycol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Ethylene Glycol	Ingestion	liver	Not classified	Human	NOAEL Not available	poisoning and/or abuse

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethylene Glycol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 200 mg/kg/day	2 years
Ethylene Glycol	Ingestion	vascular system	Not classified	Rat	NOAEL 200 mg/kg/day	2 years
Ethylene Glycol	Ingestion	heart   hematopoietic system   liver   immune system   muscles	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	respiratory system	Not classified	Mouse	NOAEL 12,000 mg/kg/day	2 years
Ethylene Glycol	Ingestion	skin   endocrine system   bone, teeth, nails, and/or hair   nervous system   eyes	Not classified	Multiple animal species	NOAEL 1,000 mg/kg/day	2 years

**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**SECTION 14: Transport Information**

**SECTION 15: Regulatory information**

**15.1. US Federal Regulations**

Contact 3M for more information.

**EPCRA 311/312 Hazard Classifications:**

**Physical Hazards**

Organic peroxide

**Health Hazards**

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient

C.A.S. No

% by Wt

## 3M™ Blue Cream Hardener for DMS

Benzoyl Peroxide	94-36-0	Trade Secret	30 - 60
Zinc Stearate (ZINC COMPOUNDS)	557-05-1	1 - 5	
Ethylene Glycol	107-21-1	Trade Secret	1 - 5

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health: 2 Flammability: 0 Instability: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Document Group:** 37-4241-8 **Version Number:** 1.03

**DISCLAIMER:** The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy.





## Safety Data Sheet

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

**Document Group:** 26-9610-2 **Version Number:** 4.01

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Reinforced Filler PN 05877

#### Product Identification Numbers

LB-K100-1073-0, LB-K100-0705-4, LB-K100-1245-9, 41-0003-7955-6, 41-0003-8094-3, 41-3701-1590-3, 60-4550-7032-0, 60-4550-8833-0  
7100142903, 7000120154

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Automotive, Body Filler packaged in cartridge for Dynamic Mixing System

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Automotive Aftermarket

### SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

#### 2.1. Hazard classification

Flammable Liquid: Category 3.  
Serious Eye Damage/Irritation: Category 2B.  
Carcinogenicity: Category 2.  
Specific Target Organ Toxicity (single exposure): Category 1.  
Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

**Signal word**

---

Danger

**Symbols**

Flame | Health Hazard |

**Pictograms**



**Hazard Statements**

Flammable liquid and vapor.

Causes eye irritation.

Suspected of causing cancer.

Causes damage to organs:

liver |  
sensory organs |

Causes damage to organs through prolonged or repeated exposure:

respiratory system |  
sensory organs |

May cause damage to organs through prolonged or repeated exposure:

liver |

**Precautionary Statements**

**General:**

Keep out of reach of children.

**Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

**Response:**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

---

**Storage:**

Store in a well-ventilated place. Keep cool.  
Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**SECTION 3: Composition/information on ingredients**

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>% by Wt</b>
Polyester Polymer	Trade Secret*	15 - 40 Trade Secret *
Talc	14807-96-6	15 - 40 Trade Secret *
Magnesium Carbonate	546-93-0	10 - 30 Trade Secret *
Styrene Monomer	100-42-5	< 20 Trade Secret *
Synthetic Crystalline-Free Silica Gel	112926-00-8	1 - 5 Trade Secret *
Glass Filament	65997-17-3	3 - 7 Trade Secret *
Chlorite (Mineral)	1318-59-8	< 5 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

**Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

**Eye Contact:**

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

**SECTION 5: Fire-fighting measures****5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**5.2. Special hazards arising from the substance or mixture**

Closed containers exposed to heat from fire may build pressure and explode.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Hydrocarbons	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Styrene Oxide	During Combustion
Toxic Vapor, Gas, Particulate	During Combustion

### 5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

### 6.3. Methods and material for containment and cleaning up

Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from acids. Store away from strong bases. Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
Styrene Monomer	100-42-5	ACGIH	TWA:20 ppm;STEL:40 ppm	A4: Not class. as human carcin
Styrene Monomer	100-42-5	OSHA	TWA:100 ppm;CEIL:200 ppm	
SILICA, AMORPHOUS	112926-00-8	OSHA	TWA concentration:0.8 mg/m <sup>3</sup> ;TWA:20 millions of particles/cu. ft.	
DUST, INERT OR NUISANCE	14807-96-6	OSHA	TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m <sup>3</sup> );TWA(respirable fraction):15 millions of particles/cu. ft.(5 mg/m <sup>3</sup> );TWA(respirable fraction):5 mg/m <sup>3</sup>	
Talc	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m <sup>3</sup>	A4: Not class. as human carcin
Talc	14807-96-6	OSHA	TWA:2 mg/m <sup>3</sup>	
Magnesium Carbonate	546-93-0	OSHA	TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>	
Glass Filament	65997-17-3	Manufacturer determined	TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m <sup>3</sup> ;TWA(as non-fibrous, respirable)(8 hours):3 mg/m <sup>3</sup>	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**8.2. Exposure controls****8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

**Skin/hand protection**

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Fluoroelastomer

Polyvinyl Alcohol (PVA)

Polymer laminate

**Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>General Physical Form:</b>	Liquid
<b>Specific Physical Form:</b>	Paste
<b>Odor, Color, Grade:</b>	Green paste, styrenic odor
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	293 °F [ <i>Details:CONDITIONS: (Styrene)</i> ]
<b>Flash Point</b>	89 °F [ <i>Test Method:Closed Cup</i> ]
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	4.3 mmHg [ <i>Details:CONDITIONS: at 20 C (Styrene)</i> ]
<b>Vapor Density</b>	3.6 [ <i>Ref Std:AIR=1</i> ] [ <i>Details:CONDITIONS: (Styrene)</i> ]
<b>Density</b>	1.63 g/ml
<b>Specific Gravity</b>	1.63 [ <i>Ref Std:WATER=1</i> ]
<b>Solubility in Water</b>	Nil
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	<i>No Data Available</i>
<b>Hazardous Air Pollutants</b>	0.29 lb HAPS/lb solids [ <i>Test Method:Calculated</i> ]
<b>Volatile Organic Compounds</b>	257 g/l [ <i>Test Method:calculated SCAQMD rule 443.1</i> ]
<b>Volatile Organic Compounds</b>	15.8 % weight [ <i>Test Method:calculated per CARB title 2</i> ]
<b>Percent volatile</b>	15.8 % weight [ <i>Details:excluding exempt compounds</i> ]
<b>VOC Less H2O &amp; Exempt Solvents</b>	257 g/l [ <i>Test Method:calculated SCAQMD rule 443.1</i> ]

**SECTION 10: Stability and reactivity****10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong acids

Strong bases

Strong oxidizing agents

### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

#### Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

#### Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### Ingestion:

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

#### Additional Health Effects:

---

**3M™ Reinforced Filler PN 05877****Single exposure may cause target organ effects:**

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

**Prolonged or repeated exposure may cause target organ effects:**

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Styrene Monomer	100-42-5	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
Styrene Monomer	100-42-5	Anticipated human carcinogen	National Toxicology Program Carcinogens

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
Talc	Dermal		LD50 estimated to be > 5,000 mg/kg
Talc	Ingestion		LD50 estimated to be > 5,000 mg/kg
Polyester Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyester Polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Magnesium Carbonate	Dermal	Professional judgment	LD50 estimated to be 2,000 - 5,000 mg/kg
Magnesium Carbonate	Ingestion	Rat	LD50 > 2,000 mg/kg
Styrene Monomer	Dermal	Rat	LD50 > 2,000 mg/kg
Styrene Monomer	Inhalation-Vapor (4 hours)	Rat	LC50 8.3 mg/l
Styrene Monomer	Ingestion	Rat	LD50 5,000 mg/kg
Synthetic Crystalline-Free Silica Gel	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic Crystalline-Free Silica Gel	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic Crystalline-Free Silica Gel	Ingestion	Rat	LD50 > 5,110 mg/kg
Glass Filament	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass Filament	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Chlorite (Mineral)	Dermal		LD50 estimated to be > 5,000 mg/kg
Chlorite (Mineral)	Ingestion		LD50 estimated to be > 5,000 mg/kg



ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Talc	Rabbit	No significant irritation
Magnesium Carbonate	In vitro data	No significant irritation
Styrene Monomer	official classification	Mild irritant
Synthetic Crystalline-Free Silica Gel	Rabbit	No significant irritation
Glass Filament	Professional judgement	No significant irritation
Chlorite (Mineral)	Professional judgement	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Talc	Rabbit	No significant irritation
Magnesium Carbonate	Rabbit	Mild irritant
Styrene Monomer	official classification	Moderate irritant
Synthetic Crystalline-Free Silica Gel	Rabbit	No significant irritation
Glass Filament	Professional judgement	No significant irritation
Chlorite (Mineral)	Professional judgement	No significant irritation

**Skin Sensitization**

Name	Species	Value
Styrene Monomer	Guinea pig	Not classified
Synthetic Crystalline-Free Silica Gel	Human and animal	Not classified

**Respiratory Sensitization**

Name	Species	Value
Talc	Human	Not classified

**Germ Cell Mutagenicity**

Name	Route	Value
Talc	In Vitro	Not mutagenic
Talc	In vivo	Not mutagenic
Styrene Monomer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Styrene Monomer	In vivo	Some positive data exist, but the data are not sufficient for classification
Synthetic Crystalline-Free Silica Gel	In Vitro	Not mutagenic
Glass Filament	In Vitro	Some positive data exist, but the data are not

sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Talc	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
Styrene Monomer	Ingestion	Mouse	Carcinogenic
Styrene Monomer	Inhalation	Human and animal	Carcinogenic
Synthetic Crystalline-Free Silica Gel	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
Glass Filament	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Talc	Ingestion	Not classified for development	Rat	NOAEL 1,600 mg/kg	during organogenesis
Styrene Monomer	Ingestion	Not classified for female reproduction	Rat	NOAEL 21 mg/kg/day	3 generation
Styrene Monomer	Inhalation	Not classified for female reproduction	Rat	NOAEL 2.1 mg/l	2 generation
Styrene Monomer	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.1 mg/l	2 generation
Styrene Monomer	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	60 days
Styrene Monomer	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during gestation
Styrene Monomer	Inhalation	Not classified for development	Multiple animal species	NOAEL 2.1 mg/l	during gestation
Synthetic Crystalline-Free Silica Gel	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic Crystalline-Free Silica Gel	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic Crystalline-Free Silica Gel	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Styrene Monomer	Inhalation	auditory system	Causes damage to organs	Multiple animal species	LOAEL 4.3 mg/l	not available
Styrene Monomer	Inhalation	liver	Causes damage to organs	Mouse	LOAEL 2.1 mg/l	not available
Styrene Monomer	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
Styrene Monomer	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	
Styrene Monomer	Inhalation	endocrine system	Not classified	Rat	NOAEL Not available	not available
Styrene Monomer	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2.1 mg/l	not available

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Talc	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Talc	Inhalation	pulmonary fibrosis   respiratory system	Not classified	Rat	NOAEL 18 mg/m <sup>3</sup>	113 weeks
Styrene Monomer	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Styrene Monomer	Inhalation	auditory system	May cause damage to organs though prolonged or repeated exposure	Multiple animal species	NOAEL 1.3 mg/l	not available
Styrene Monomer	Inhalation	liver	May cause damage to organs though prolonged or repeated exposure	Mouse	LOAEL 0.85 mg/l	13 weeks
Styrene Monomer	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	LOAEL 1.1 mg/l	not available
Styrene Monomer	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 0.85 mg/l	7 days
Styrene Monomer	Inhalation	endocrine system	Not classified	Rat	NOAEL 0.6 mg/l	10 days
Styrene Monomer	Inhalation	respiratory system	Not classified	Multiple animal species	LOAEL 0.09 mg/l	not available
Styrene Monomer	Inhalation	heart   gastrointestinal tract   bone, teeth, nails, and/or hair   muscles   kidney and/or bladder	Not classified	Multiple animal species	NOAEL 4.3 mg/l	2 years
Styrene Monomer	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 500 mg/kg/day	8 weeks
Styrene Monomer	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
Styrene Monomer	Ingestion	liver   kidney and/or bladder	Not classified	Rat	NOAEL 677 mg/kg/day	6 months
Styrene Monomer	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 600 mg/kg/day	470 days
Styrene Monomer	Ingestion	heart   respiratory system	Not classified	Rat	NOAEL 35 mg/kg/day	105 weeks
Synthetic Crystalline-Free Silica Gel	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Glass Filament	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure

**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

**SECTION 12: Ecological information****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/ mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

## SECTION 14: Transport Information

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### EPCRA 311/312 Hazard Classifications:

##### Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

##### Health Hazards

Carcinogenicity

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

#### Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Styrene Monomer	100-42-5	Trade Secret < 20

### 15.2. State Regulations

Contact 3M for more information.

#### California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Listing</u>
STYRENE	100-42-5	Carcinogen

### 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

---

## 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 1 **Flammability:** 3 **Instability:** 1 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### HMIS Hazard Classification

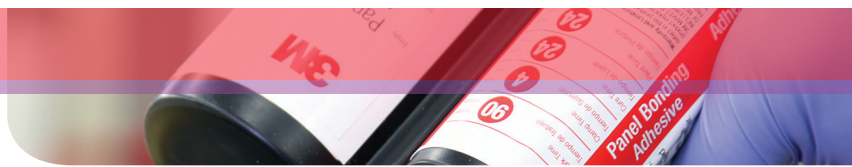
**Health:** \*4 **Flammability:** 3 **Physical Hazard:** 1 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

**Document Group:** 26-9610-2 **Version Number:** 4.01

**DISCLAIMER:** The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.



## 3M Auto Body Repair Dynamic Mixing System

### 3M™ Dynamic Mixing System

A comprehensive solution incorporating products you know and trust.

#### Adhesive, Seam Sealer & Plastic Repair

Part No.	Product Name	Nozzle	Description
<b>NEW!</b> 58115	3M™ Panel Bonding Adhesive	Purple	Two-part epoxy used to bond steel, aluminum, SMC, and FRP (traditional fiberglass) which has excellent adhesion to a wide variety of plastic and metal substrates.
<b>NEW!</b> 58308	3M™ Heavy Bodied Seam Sealer	Purple	Two-part epoxy for use in vertical or horizontal seams to match OEM sealers. Non-sagging, non-flowing, and easy to tool.
<b>NEW!</b> 55887	3M™ EZ Sand Flexible Repair Material	Purple	Two-part epoxy used to repair most flexible plastic parts, including bumper covers and other plastic body panels. This product should NOT be used with SMC/fiberglass. This product is easy sanding and formulated for excellent featheredge.

#### Premium Dent Filling Compounds

Part No.	Product Name	Nozzle	Description
05859	3M™ Dent Filling Compound - 95	Red	Increased Work Time for Hot Temperatures or Large Areas
05863	3M™ Platinum Plus Body Filler	Red	3M's Most Popular filler, packaged for dynamic mixing

#### Premium Dent Finishing Glazes

Part No.	Product Name	Nozzle	Description
05857	3M™ Dent Finishing Glaze	Red	Outstanding Flowability, perfect for minor imperfections
05862	3M™ Platinum Glaze	Red	Thicker formula offering better sag resistance

#### Premium Specialty Fillers

Part No.	Product Name	Nozzle	Description
05877	3M™ Short Strand Reinforced Filler	Red	More strength than standard fillers while being water resistant

#### Hardgoods and Accessories

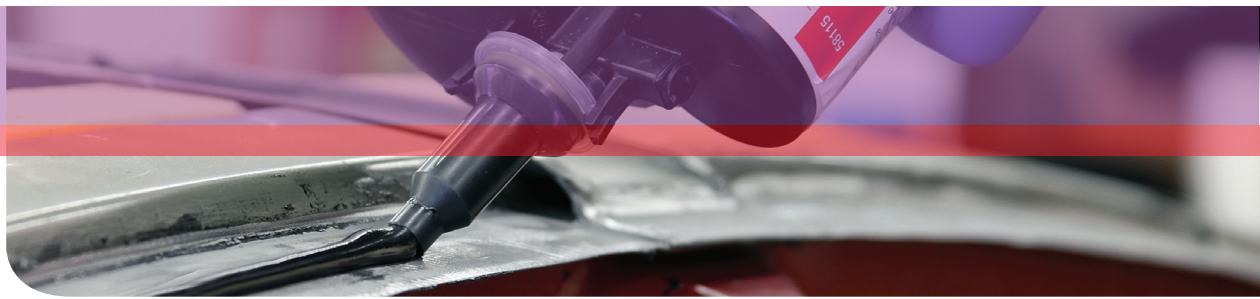
Part No.	Product Name	Nozzle	Description
<b>NEW!</b> 55849	3M™ Dynamic Mixing System Kit	NA	Kit includes DMS Gun, Gun holder, Mixing Tips & Tips rack and nozzle extensions
05846	3M™ Dynamic Mixing Applicator Gun	NA	Innovative pneumatic tool that makes Dynamic Mixing possible
<b>NEW!</b> 58207	3M™ Dynamic Mixing Nozzle Extension	NA	Allows you to duplicate many of the OEM applied seam sealer beads without a lot of extra time and effort.
<b>NEW!</b> 55847	3M™ Dynamic Mixing Nozzles (1:1 & 2:1)	Purple	This nozzle's active mixing action completely blends materials, and its short length guarantees low waste. Use with 1:1 & 2:1 products only)
05847	3M™ Dynamic Mixing Nozzles (50:1)	Red	Proprietary design that defines Dynamic Mixing with low waste
02576	Shop Rack for Bulk Boxed 3M™ Nozzles	NA	Magnetic Rack to keep nozzles near the work area - and close at hand



Now you can maximize time and profits  
with craftsman level results!

The 3M™ Dynamic Mixing System increases job productivity while ensuring the body repair quality you've come to expect from 3M. By mixing a wide-range of 2-component products directly in the nozzle, the applicator quickly delivers the perfect ratio of product every time. Maximize productivity, reduce waste and increase profits with this innovative system – now a comprehensive solution including fillers, glazes, adhesives, sealers and plastic repair products.





## The 3M™ Dynamic Mixing System

### Advanced technology

#### – streamlining the auto body repair process

With the Dynamic Mixing System, you dispense fillers, glazes, adhesives, sealers and plastic repair products when and where you want them, at the touch of a trigger. There is no messy mixing process, no wasted materials, and no lost time cleaning up. By utilizing the correct amount of product and reducing consumption, you save both materials and time.



#### The Applicator

Powered by your shop's pneumatic air system, this easy-to-use device comfortably fits any grip and is always ready to dispense fillers, glazes, adhesives, sealers and plastic repair products. Its durable construction is built to last and stands up to heavy-duty performance, day in and day out. It's the innovative new tool - ensuring you outstanding results more quickly and with less waste.

#### The Mixing Nozzles

With this dispensing system and 3M's mixing nozzles, you will never again worry about adding too much – or too little hardener to filler and glazes. By thoroughly mixing two-part products in an short distance, 3M's DMS nozzles deliver body repair products to the part faster than any manual applicator and static mixing nozzle combination.



## How the system works: It's as easy as TWIST, MIX & FIX!



#### TWIST

a cartridge into place on the applicator until it locks into place.



#### MIX

the 2-component product automatically by simply pulling the trigger on the applicator. Add a mixing nozzle and watch as it precisely mixes and dispenses a perfect ratio of product, eliminating guesswork!



#### FIX, BOND AND SEAL

instantly by applying the product directly from the applicator to the surface and spread into place!

Nothing is faster, easier and reduces more waste!

## The Perfect Mix Of Products

#### Features and Benefits

- Pneumatic applicator dispenses a wide variety of products on demand
- Nozzles automatically mix products as you go, increasing productivity
- Increased dispense rate ensures faster repairs and decreased cycle times
- Potential job costing opportunity

#### Adhesives, Sealers and Plastic Repair Products

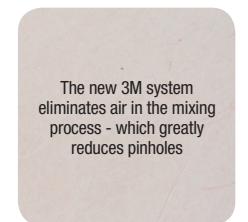
Expanded to include tried and true products you know and trust, adhesives, sealers and plastic repair products are now part of the Dynamic Mixing System family. This enhanced dispensing of high-viscosity materials decreases cycle time, reduces application waste, and increases Key Performance Indicators (KPI). Easy-on/easy-off cartridges improve efficiency – meaning you're ready for job after job with no downtime for mixing mistakes.

#### Fillers and Glazes

3M's enhanced cartridge design delivers the perfect ratio of mixed product to the car's surface. With traditional mixes, up to 40% of the product can end up unused. However, with 3M's Dynamic Mixing System, you don't lose what you don't use – significantly reducing waste. The absence of air in the cartridge and mixing nozzle prevents over-catalyzation and virtually eliminates pinholes. Within this sealed environment, the filler or glaze and hardener are mixed to a perfect ratio – for outstanding results in less time.



Traditional repair methods leave air pocket pinholes



The new 3M system eliminates air in the mixing process - which greatly reduces pinholes

Check out the collection of paint and body repair we offer.