



## Safety Data Sheet

Copyright, 2020, 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.

<b>Document Group:</b>	29-1915-7	<b>Version Number:</b>	2.02
<b>Issue Date:</b>	09/09/20	<b>Supersedes Date:</b>	05/08/17

### Product identifier

3M™ Scotch-Weld™ Structural Void Filling Compound EC-3505 B/A FR

### ID Number(s):

87-2500-0432-9, 87-2500-0433-7, 87-2500-0452-7

7000133727, 7000133728, 7000133732

### Recommended use

Adhesive

### Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Automotive and Aerospace Solutions Division

<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

### Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

**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:**

29-1913-2, 29-1912-4

**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 USA SDSs are available at [www.3M.com](http://www.3M.com)



## Safety Data Sheet

Copyright,2020, 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.

<b>Document Group:</b>	29-1913-2	<b>Version Number:</b>	4.04
<b>Issue Date:</b>	08/31/20	<b>Supersedes Date:</b>	05/08/17

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Scotch-Weld™ Structural Void Filling Compound EC-3505 B/A FR Part A

#### Product Identification Numbers

LC-B100-1077-4, LC-B100-0904-9, LC-B100-0905-0, 87-2500-0459-2, 87-2500-0484-0  
7000133733, 7100181032

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

##### Recommended use

Accelerator for two component adhesive

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Automotive and Aerospace Solutions Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Corrosive to metal: Category 1.  
Acute Toxicity (oral): Category 4.  
Serious Eye Damage/Irritation: Category 1.  
Skin Corrosion/Irritation: Category 1C.  
Skin Sensitizer: Category 1A.  
Specific Target Organ Toxicity (single exposure): Category 1.  
Specific Target Organ Toxicity (single exposure): Category 3.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Corrosion | Exclamation mark | Health Hazard |

**Pictograms****Hazard Statements**

May be corrosive to metals.

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs:  
blood or blood-forming organs |

**Precautionary Statements****Prevention:**

Keep only in original container.

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

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing, 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 INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

Immediately call a POISON CENTER or doctor/physician.

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

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Call a POISON CENTER or doctor/physician if you feel unwell.

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

Absorb spillage to prevent material damage.

**Storage:**

Store in a corrosive resistant container with a resistant inner liner.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

**Disposal:**

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

**Notes to Physician:**

Overexposure to this product may result in methemoglobinemia. Methemoglobinemia may be clinically suspected by the presence of clinical "cyanosis" in the presence of a normal PaO<sub>2</sub> (as obtained by arterial blood gases). Routine pulse oximetry

may be inaccurate for monitoring oxygen saturation in the presence of methemoglobinemia, and should not be used to make the diagnosis of this disorder. If the patient is symptomatic or if the methemoglobin level is >20%, specific therapy with methylene blue should be considered as part of the medical management.

### 2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns.

#### Supplemental Information:

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

25% of the mixture consists of ingredients of unknown acute dermal toxicity.

## SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
BENZYL ALCOHOL	100-51-6	15 - 40 Trade Secret *
ISOPHORONE DIAMINE	2855-13-2	15 - 40 Trade Secret *
GLASS BUBBLES	65997-17-3	10 - 30
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	90-72-2	10 - 20 Trade Secret *
MODIFIED ALIPHATIC AMINE	68609-08-5	3 - 15 Trade Secret *
CALCIUM SALT	13477-34-4	< 10 Trade Secret *
LIMESTONE	1317-65-3	1 - 10
BIS[(DIMETHYLAMINO)METHYL]PHENOL	71074-89-0	0.5 - 2.5 Trade Secret *
POLYAMIDE	None	< 2.5
ISOPENTANE	78-78-4	< 0.5

\*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 flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

#### 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. Do not induce vomiting. Get immediate 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

Overexposure to this product may result in methemoglobinemia. Methemoglobinemia may be clinically suspected by the presence of clinical "cyanosis" in the presence of a normal PaO<sub>2</sub> (as obtained by arterial blood gases). Routine pulse oximetry

may be inaccurate for monitoring oxygen saturation in the presence of methemoglobinemia, and should not be used to make the diagnosis of this disorder. If the patient is symptomatic or if the methemoglobin level is >20%, specific therapy with methylene blue should be considered as part of the medical management.

## 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>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	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.

## SECTION 6: Accidental release measures

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

Evacuate area. 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. 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

Contain spill. 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. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. 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. Cover, but do not seal for 48 hours. 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

Avoid skin contact with hot material. For industrial/occupational use only. Not for consumer sale or use. 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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

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

Store in a well-ventilated place. Keep container tightly closed. Store away from heat. Keep only in original container.

Store in a corrosive resistant container with a resistant inner liner. Store away from acids. 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.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
BENZYL ALCOHOL	100-51-6	AIHA	TWA:44.2 mg/m <sup>3</sup> (10 ppm)	
LIMESTONE	1317-65-3	OSHA	TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>	
GLASS BUBBLES	65997-17-3	Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m <sup>3</sup> ;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m <sup>3</sup>	
ISOPENTANE	78-78-4	ACGIH	TWA:1000 ppm	

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

Provide ventilated enclosure for curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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:

Full Face Shield

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: Butyl Rubber

Fluoroelastomer

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 – Butyl rubber

Apron – Nitrile

Apron - 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.

### Thermal hazards

Wear heat insulating gloves when handling hot material to prevent thermal burns.

## SECTION 9: Physical and chemical properties

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

#### Appearance

Physical state

Liquid

Color

Yellow

Specific Physical Form:

Paste

Odor

Low Odor

Odor threshold

*No Data Available*

pH

*No Data Available*

Melting point

*Not Applicable*

Boiling Point

*Not Applicable*

Flash Point

$\geq 200$  °F [*Test Method: Closed Cup*]

Evaporation rate

*Not Applicable*

Flammability (solid, gas)

Not Applicable

Flammable Limits(LEL)

*No Data Available*

Flammable Limits(UEL)

*No Data Available*

Vapor Pressure

*No Data Available*

Vapor Density

*No Data Available*

Density

0.4 - 0.45 g/cm<sup>3</sup>

Specific Gravity

0.3 - 0.6 [*Ref Std: WATER=1*]

Solubility in Water

Negligible

Solubility- non-water

*No Data Available*

Partition coefficient: n-octanol/ water

*No Data Available*

Autoignition temperature

*No Data Available*

Decomposition temperature

*No Data Available*

Viscosity

*No Data Available*

Hazardous Air Pollutants

*No Data Available*

Volatile Organic Compounds

$\leq 135$  g/l [*Test Method: calculated SCAQMD rule 443.1*]

VOC Less H<sub>2</sub>O & Exempt Solvents

$\leq 135$  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

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

**10.5. Incompatible materials**

Strong oxidizing agents

**10.6. Hazardous decomposition products****Substance****Condition**

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.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

**Skin Contact:**

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Eye Contact:**

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Ingestion:**

Harmful if swallowed. Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May cause additional health effects (see below).

**Additional Health Effects:****Single exposure may cause target organ effects:**

Methemoglobinemia: Signs/symptoms may include headache, dizziness, nausea, difficulty breathing, and generalized weakness.

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

**Additional Information:**

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

**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	Ingestion		No data available; calculated ATE300 - 2,000 mg/kg
ISOPHORONE DIAMINE	Dermal	Rat	LD50 > 2,000 mg/kg
ISOPHORONE DIAMINE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 estimated to be 1 - 5 mg/l
ISOPHORONE DIAMINE	Ingestion	Rat	LD50 1,030 mg/kg
BENZYL ALCOHOL	Inhalation-Dust/Mist (4 hours)	Rat	LC50 8.8 mg/l
BENZYL ALCOHOL	Ingestion	Rat	LD50 1,230 mg/kg
GLASS BUBBLES	Dermal		LD50 estimated to be > 5,000 mg/kg
GLASS BUBBLES	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	Dermal	Rat	LD50 1,280 mg/kg
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	Ingestion	Rat	LD50 1,000 mg/kg
MODIFIED ALIPHATIC AMINE	Dermal	Rat	LD50 > 2,000 mg/kg
MODIFIED ALIPHATIC AMINE	Ingestion	Rat	LD50 >300, <2000 mg/kg
LIMESTONE	Dermal	Rat	LD50 > 2,000 mg/kg
LIMESTONE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
LIMESTONE	Ingestion	Rat	LD50 6,450 mg/kg
BIS[(DIMETHYLAMINO)METHYL]PHENOL	Ingestion		LD50 estimated to be 300 - 2,000 mg/kg
CALCIUM SALT	Ingestion	Rat	LD50 >300, <2000 mg/kg
CALCIUM SALT	Dermal	similar compounds	LD50 > 2,000 mg/kg
POLYAMIDE	Dermal	Rat	LD50 > 2,000
POLYAMIDE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.3
POLYAMIDE	Ingestion	Rat	LD50 > 2,000
ISOPENTANE	Dermal	Rabbit	LD50 3,000 mg/kg
ISOPENTANE	Inhalation-Vapor (4	Rat	LC50 > 18 mg/l

	hours)		
ISOPENTANE	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
ISOPHORONE DIAMINE	official classification	Corrosive
BENZYL ALCOHOL	Multiple animal species	Mild irritant
GLASS BUBBLES	Professional judgement	No significant irritation
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	Rabbit	Corrosive
MODIFIED ALIPHATIC AMINE	Rabbit	Minimal irritation
LIMESTONE	Rabbit	No significant irritation
BIS[(DIMETHYLAMINO)METHYL]PHENOL	similar compounds	Corrosive
CALCIUM SALT	similar compounds	No significant irritation
POLYAMIDE	Rabbit	No significant irritation
ISOPENTANE	Rabbit	Minimal irritation

### Serious Eye Damage/Irritation

Name	Species	Value
ISOPHORONE DIAMINE	Rabbit	Corrosive
BENZYL ALCOHOL	Rabbit	Severe irritant
GLASS BUBBLES	Professional judgement	No significant irritation
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	Rabbit	Corrosive
MODIFIED ALIPHATIC AMINE	Rabbit	Mild irritant
LIMESTONE	Rabbit	No significant irritation
BIS[(DIMETHYLAMINO)METHYL]PHENOL	similar compounds	Corrosive
CALCIUM SALT	Rabbit	Corrosive
POLYAMIDE	Rabbit	Mild irritant
ISOPENTANE	Rabbit	Mild irritant

### Skin Sensitization

Name	Species	Value
ISOPHORONE DIAMINE	Guinea pig	Sensitizing
BENZYL ALCOHOL	Human and animal	Not classified
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	Guinea pig	Not classified
MODIFIED ALIPHATIC AMINE	Mouse	Sensitizing
CALCIUM SALT	similar compounds	Not classified
POLYAMIDE	Mouse	Not classified
ISOPENTANE	Guinea pig	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
ISOPHORONE DIAMINE	In Vitro	Not mutagenic
ISOPHORONE DIAMINE	In vivo	Not mutagenic
BENZYL ALCOHOL	In vivo	Not mutagenic
BENZYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
GLASS BUBBLES	In Vitro	Some positive data exist, but the data are not sufficient for classification
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	In Vitro	Not mutagenic
MODIFIED ALIPHATIC AMINE	In Vitro	Not mutagenic
CALCIUM SALT	In Vitro	Not mutagenic
ISOPENTANE	In vivo	Not mutagenic
ISOPENTANE	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
BENZYL ALCOHOL	Ingestion	Multiple animal species	Not carcinogenic
GLASS BUBBLES	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
ISOPHORONE DIAMINE	Ingestion	Not classified for development	Rat	NOAEL 250 mg/kg/day	during gestation
BENZYL ALCOHOL	Ingestion	Not classified for development	Mouse	NOAEL 550 mg/kg/day	during organogenesis
MODIFIED ALIPHATIC AMINE	Ingestion	Not classified for female reproduction	Rat	NOAEL 150 mg/kg/day	prematuring into lactation
MODIFIED ALIPHATIC AMINE	Ingestion	Not classified for male reproduction	Rat	NOAEL 150 mg/kg/day	28 days
MODIFIED ALIPHATIC AMINE	Ingestion	Not classified for development	Rat	NOAEL 80 mg/kg/day	prematuring into lactation
LIMESTONE	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation
CALCIUM SALT	Ingestion	Not classified for female reproduction	similar compounds	NOAEL 1,500 mg/kg/day	prematuring into lactation
CALCIUM SALT	Ingestion	Not classified for male reproduction	similar compounds	NOAEL 1,500 mg/kg/day	28 days
CALCIUM SALT	Ingestion	Not classified for development	similar compounds	NOAEL 1,500 mg/kg/day	prematuring into lactation
ISOPENTANE	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during organogenesis
ISOPENTANE	Inhalation	Not classified for development	Rat	NOAEL 30 mg/l	during organogenesis

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

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ISOPHORONE DIAMINE	Inhalation	respiratory irritation	May cause respiratory irritation	Rat	LOAEL 0.002 mg/l	2 weeks
BENZYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
BENZYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
BENZYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
LIMESTONE	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes
CALCIUM SALT	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
CALCIUM SALT	Ingestion	methemoglobinemia	Causes damage to organs	Human	NOAEL Not available	environmental exposure
ISOPENTANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	not available
ISOPENTANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	not available
ISOPENTANE	Inhalation	cardiac sensitization	Not classified	Dog	NOAEL Not available	not available
ISOPENTANE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgment	NOAEL Not available	not available

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ISOPHORONE DIAMINE	Ingestion	hematopoietic system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 160 mg/kg/day	13 weeks
BENZYL ALCOHOL	Ingestion	endocrine system   muscles   kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	13 weeks
BENZYL ALCOHOL	Ingestion	nervous system   respiratory system	Not classified	Mouse	NOAEL 645 mg/kg/day	8 days
GLASS BUBBLES	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	Dermal	skin   liver   nervous system   auditory system   hematopoietic system   eyes	Not classified	Rat	NOAEL 125 mg/kg/day	28 days
MODIFIED ALIPHATIC AMINE	Ingestion	hematopoietic system   heart   endocrine system   bone, teeth, nails, and/or hair   liver   immune system   muscles   nervous system   kidney and/or bladder	Not classified	Rat	NOAEL 200 mg/kg/day	28 days

LIMESTONE	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
CALCIUM SALT	Ingestion	heart   skin   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system	Not classified	similar compounds	NOAEL 1,500 mg/kg/day	28 days
ISOPENTANE	Inhalation	peripheral nervous system	Not classified	Human	NOAEL Not available	occupational exposure
ISOPENTANE	Inhalation	heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 20 mg/l	13 weeks
ISOPENTANE	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days

**Aspiration Hazard**

Name	Value
ISOPENTANE	Aspiration hazard

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. 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.

EPA Hazardous Waste Number (RCRA): D002 (Corrosive)

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### EPCRA 311/312 Hazard Classifications:

##### Physical Hazards

Corrosive to metal

##### Health Hazards

Acute toxicity

Hazard Not Otherwise Classified (HNOC)

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

Skin Corrosion or Irritation

Specific target organ toxicity (single or repeated exposure)

### 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: 3 Flammability: 1 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: 29-1913-2  
Issue Date: 08/31/20

Version Number: 4.04  
Supersedes Date: 05/08/17

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 USA SDSs are available at [www.3M.com](http://www.3M.com)**





## Safety Data Sheet

Copyright,2020, 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.

<b>Document Group:</b>	29-1912-4	<b>Version Number:</b>	5.01
<b>Issue Date:</b>	09/09/20	<b>Supersedes Date:</b>	11/13/18

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Scotch-Weld™ Structural Void Filling Compound EC-3505 B/A FR, Part B

#### Product Identification Numbers

LC-B100-1077-5, LC-B100-0904-7, LC-B100-0904-8, 87-2500-0458-4, 87-2500-0485-7  
7100141412, 7100181030

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

##### Recommended use

Base for two component void filling compound

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Automotive and Aerospace Solutions Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1A.

#### 2.2. Label elements

##### Signal word

Warning

##### Symbols

Exclamation mark |

##### Pictograms

**Hazard Statements**

Causes serious eye irritation.  
 Causes skin irritation.  
 May cause an allergic skin reaction.

**Precautionary Statements****Prevention:**

Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Wear protective gloves and eye/face protection.  
 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.  
 Take off contaminated clothing and wash it before reuse.

**Disposal:**

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

2% of the mixture consists of ingredients of unknown acute oral toxicity.

2% of the mixture consists of ingredients of unknown acute dermal toxicity.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	9003-36-5	20 - 40 Trade Secret *
EPOXY DILUENT	14228-73-0	10 - 30 Trade Secret *
GLASS BUBBLES	65997-17-3	10 - 30
EPOXY RESIN	25068-38-6	1 - 15 Trade Secret *
GRAPHITE	7782-42-5	1 - 15
PHENOL-FORMALDEHYDE POLYMER	28064-14-4	1 - 15 Trade Secret *
LIMESTONE	1317-65-3	1 - 10
PHOSPHOROUS	7723-14-0	<= 10 Trade Secret *
SILANE	2530-83-8	0.1 - 3 Trade Secret *
Sulfuric Acid	7664-93-9	<= 1.5 Trade Secret *
PHOSPHORIC ACID POLYESTER	Trade Secret*	< 1
STANNOUS SULFATE	7488-55-3	< 0.5 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

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam 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

**Substance**

Aldehydes  
Carbon monoxide  
Carbon dioxide  
Hydrogen Chloride  
Oxides of Sulfur

**Condition**

During Combustion  
During Combustion  
During Combustion  
During Combustion  
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. 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. 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

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. Place in a closed 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

Avoid skin contact with hot material. For industrial/occupational use only. Not for consumer sale or use. Avoid breathing 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

Store away from heat. 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
LIMESTONE	1317-65-3	OSHA	TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>	
GLASS BUBBLES	65997-17-3	Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m <sup>3</sup> ;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m <sup>3</sup>	
TIN, INORGANIC COMPOUNDS, EXCEPT OXIDES	7488-55-3	OSHA	TWA(as Sn):2 mg/m <sup>3</sup>	
STRONG INORGANIC ACID MISTS CONTAINING SULFURIC ACID	7664-93-9	ACGIH	Limit value not established:	A2: Suspected human carcin.
Sulfuric Acid	7664-93-9	ACGIH	TWA(thoracic fraction):0.2 mg/m <sup>3</sup>	
Sulfuric Acid	7664-93-9	OSHA	TWA:1 mg/m <sup>3</sup>	
PHOSPHOROUS	7723-14-0	OSHA	TWA:0.1 mg/m <sup>3</sup>	
GRAPHITE	7782-42-5	ACGIH	TWA(respirable fraction):2 mg/m <sup>3</sup>	
GRAPHITE	7782-42-5	OSHA	TWA:15 millions of particles/cu. ft.	

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**

Provide ventilated enclosure for curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

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

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 - 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.

#### **Thermal hazards**

Wear heat insulating gloves when handling hot material to prevent thermal burns.

## **SECTION 9: Physical and chemical properties**

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

#### **Appearance**

**Physical state**

Liquid

**Color**

Brown

**Specific Physical Form:**

Paste

**Odor**

Low Odor

Odor threshold	No Data Available
pH	No Data Available
Melting point	Not Applicable
Boiling Point	Not Applicable
Flash Point	>=200 °F [Test Method: Closed Cup]
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Density	0.5 - 0.6 g/cm <sup>3</sup>
Specific Gravity	0.53 [Ref Std: WATER=1]
Solubility in Water	Negligible
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Hazardous Air Pollutants	No Data Available
Percent volatile	Negligible

## 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

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

### 10.5. Incompatible materials

Amines

### 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.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### Skin Contact:

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

Dust created by cutting, grinding, sanding, or machining may cause 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.

### 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	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Dermal	Rabbit	LD50 > 2,000 mg/kg
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Ingestion	Rat	LD50 > 5,000 mg/kg
GLASS BUBBLES	Dermal		LD50 estimated to be > 5,000 mg/kg
GLASS BUBBLES	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
EPOXY DILUENT	Dermal	Rabbit	LD50 > 2,000 mg/kg
EPOXY DILUENT	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.19 mg/l
EPOXY DILUENT	Ingestion	Rat	LD50 1,098 mg/kg
EPOXY RESIN	Dermal	Rat	LD50 > 1,600 mg/kg
EPOXY RESIN	Ingestion	Rat	LD50 > 1,000 mg/kg
PHENOL-FORMALDEHYDE POLYMER	Dermal	Rabbit	LD50 > 6,000 mg/kg
PHENOL-FORMALDEHYDE POLYMER	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
PHENOL-FORMALDEHYDE POLYMER	Ingestion	Rat	LD50 > 4,000 mg/kg
GRAPHITE	Dermal		LD50 estimated to be > 5,000 mg/kg
GRAPHITE	Ingestion	Rat	LD50 > 2,000 mg/kg

PHOSPHOROUS	Dermal		LD50 estimated to be > 5,000 mg/kg
PHOSPHOROUS	Inhalation-Dust/Mist (4 hours)	Rat	LC50 1.1 mg/l
PHOSPHOROUS	Ingestion	Rat	LD50 > 15,000 mg/kg
LIMESTONE	Dermal	Rat	LD50 > 2,000 mg/kg
LIMESTONE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
LIMESTONE	Ingestion	Rat	LD50 6,450 mg/kg
SILANE	Dermal	Rabbit	LD50 4,000 mg/kg
SILANE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
SILANE	Ingestion	Rat	LD50 7,010 mg/kg
STANNOUS SULFATE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 2 mg/l
STANNOUS SULFATE	Ingestion	Rat	LD50 2,207 mg/kg
STANNOUS SULFATE	Dermal	similar health hazards	LD50 estimated to be 2,000 - 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Rabbit	Mild irritant
GLASS BUBBLES	Professional judgement	No significant irritation
EPOXY DILUENT	In vitro data	Irritant
EPOXY RESIN	Rabbit	Mild irritant
PHENOL-FORMALDEHYDE POLYMER	Rabbit	Minimal irritation
GRAPHITE	Rabbit	No significant irritation
LIMESTONE	Rabbit	No significant irritation
SILANE	Rabbit	Mild irritant
STANNOUS SULFATE	Professional judgement	Irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Rabbit	No significant irritation
GLASS BUBBLES	Professional judgement	No significant irritation
EPOXY DILUENT	In vitro data	No significant irritation
EPOXY RESIN	Rabbit	Moderate irritant
PHENOL-FORMALDEHYDE POLYMER	Rabbit	Mild irritant
GRAPHITE	Rabbit	No significant irritation
LIMESTONE	Rabbit	No significant irritation
SILANE	Rabbit	Corrosive
STANNOUS SULFATE	Professional judgement	Corrosive



**Skin Sensitization**

Name	Species	Value
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Multiple animal species	Sensitizing
EPOXY DILUENT	Mouse	Sensitizing
EPOXY RESIN	Human and animal	Sensitizing
PHENOL-FORMALDEHYDE POLYMER	Human and animal	Sensitizing
SILANE	Guinea pig	Not classified
STANNOUS SULFATE	Human	Sensitizing

**Respiratory Sensitization**

Name	Species	Value
EPOXY RESIN	Human	Not classified

**Germ Cell Mutagenicity**

Name	Route	Value
GLASS BUBBLES	In Vitro	Some positive data exist, but the data are not sufficient for classification
EPOXY DILUENT	In vivo	Not mutagenic
EPOXY DILUENT	In Vitro	Some positive data exist, but the data are not sufficient for classification
EPOXY RESIN	In vivo	Not mutagenic
EPOXY RESIN	In Vitro	Some positive data exist, but the data are not sufficient for classification
PHENOL-FORMALDEHYDE POLYMER	In Vitro	Some positive data exist, but the data are not sufficient for classification
GRAPHITE	In Vitro	Some positive data exist, but the data are not sufficient for classification
SILANE	In vivo	Not mutagenic
SILANE	In Vitro	Some positive data exist, but the data are not sufficient for classification
STANNOUS SULFATE	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
GLASS BUBBLES	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
EPOXY RESIN	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
SILANE	Dermal	Mouse	Not carcinogenic

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

Name	Route	Value	Species	Test Result	Exposure Duration
EPOXY DILUENT	Ingestion	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	prematuring into lactation
EPOXY DILUENT	Ingestion	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	33 days
EPOXY DILUENT	Ingestion	Not classified for development	Rat	NOAEL 300 mg/kg/day	prematuring into lactation
EPOXY RESIN	Ingestion	Not classified for female reproduction	Rat	NOAEL 750	2 generation

EPOXY RESIN	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
EPOXY RESIN	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
EPOXY RESIN	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
LIMESTONE	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	prematings & during gestation
SILANE	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
SILANE	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	1 generation
SILANE	Ingestion	Not classified for development	Rat	NOAEL 3,000 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
EPOXY DILUENT	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
LIMESTONE	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes
STANNOUS SULFATE	Inhalation	respiratory irritation	May cause respiratory irritation	Professional judgement	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
GLASS BUBBLES	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
EPOXY DILUENT	Ingestion	endocrine system   gastrointestinal tract   liver   heart   hematopoietic system   immune system   nervous system   kidney and/or bladder	Not classified	Rat	NOAEL 300 mg/kg/day	33 days
EPOXY RESIN	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
EPOXY RESIN	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
EPOXY RESIN	Ingestion	auditory system   heart   endocrine system   hematopoietic system   liver   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
GRAPHITE	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
LIMESTONE	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
SILANE	Ingestion	heart   endocrine system   bone, teeth,	Not classified	Rat	NOAEL 1,000	28 days

		nails, and/or hair   hematopoietic system   liver   immune system   nervous system   kidney and/or bladder   respiratory system			mg/kg/day	
STANNOUS SULFATE	Ingestion	hematopoietic system   liver   heart   kidney and/or bladder	Not classified	Rat	NOAEL 40 mg/kg/day	4 weeks

**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. 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**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information**

**15.1. US Federal Regulations**

Contact 3M for more information.

**EPCRA 311/312 Hazard Classifications:**

**Physical Hazards**

Not applicable

**Health Hazards**

Respiratory or Skin Sensitization
Serious eye damage or eye irritation
Skin Corrosion or Irritation

**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>
PHOSPHOROUS	7723-14-0	Trade Secret <= 10
Sulfuric Acid	7664-93-9	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:** 1 **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.

<b>Document Group:</b>	29-1912-4	<b>Version Number:</b>	5.01
<b>Issue Date:</b>	09/09/20	<b>Supersedes Date:</b>	11/13/18

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 USA SDSs are available at [www.3M.com](http://www.3M.com)