



Safety Data Sheet

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Document Group:	29-1915-7	Version Number:	3.00
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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

MANUFACTURER:	3M
DIVISION:	Automotive and Aerospace Solutions Division

ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	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:

29-1912-4, 29-1913-2

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Document Group:	29-1913-2	Version Number:	5.00
Issue Date:	05/26/23	Supersedes Date:	08/31/20

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

MANUFACTURER:	3M
DIVISION:	Automotive and Aerospace Solutions Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	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.
Acute Toxicity (inhalation): 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.

Harmful if inhaled.

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.

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

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

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 PaO₂ (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.

27% of the mixture consists of ingredients of unknown acute dermal toxicity.

50% of the mixture consists of ingredients of unknown acute inhalation 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 *
LIMESTONE	1317-65-3	1 - 10
Calcium Salt	13477-34-4	< 3 Trade Secret *
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

Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details.

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 PaO₂ (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

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 ³ (10 ppm)	
LIMESTONE	1317-65-3	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1317-65-3	ACGIH	TWA(inhalable particulates):10 mg/m ³	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1317-65-3	ACGIH	TWA(respirable particles):3 mg/m ³	
Glass Bubbles	65997-17-3	Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m ³ ;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m ³	
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.

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

≥ 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/cm³

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

≤ 135 g/l [*Test Method: calculated SCAQMD rule 443.1*]

VOC Less H₂O & Exempt Solvents

≤ 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

<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:

Harmful if inhaled. 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.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Nitrate or nitrite (ingested) under conditions that result in endogenous nitrosation	13477-34-4	Grp. 2A: Probable human carc.	International Agency for Research on Cancer

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	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >1 - =5 mg/l
Overall product	Ingestion		No data available; calculated ATE >300 - =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	Rat	LC50 3 mg/l

	(4 hours)		
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 hours)	Rat	LC50 > 18 mg/l
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
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
Polyamide	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
Polyamide	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring into lactation
Polyamide	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Polyamide	Ingestion	Not classified for development	Rat	NOAEL 1,000 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	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL not available	
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 judgement	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	Not classified	Rat	NOAEL 160 mg/kg/day	13 weeks

		kidney and/or bladder				
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 respiratory system	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)

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

Calcium Salt (NITRATE COMPOUNDS (WATER DISSOCIABLE; REPORTABLE ONLY WHEN IN AQUEOUS SOLUTION))

C.A.S. No

13477-34-4

% by Wt

Trade Secret < 3

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.

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Safety Data Sheet

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Document Group:	29-1912-4	Version Number:	5.05
Issue Date:	09/02/22	Supersedes Date:	03/23/22

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

MANUFACTURER:	3M
DIVISION:	Automotive and Aerospace Solutions Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	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.

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
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 A	25068-38-6	1 - 15 Trade Secret *
PHENOL-FORMALDEHYDE POLYMER	28064-14-4	1 - 15 Trade Secret *
Calcium Carbonate	1317-65-3	1 - 10
PHOSPHOROUS	7723-14-0	<= 10 Trade Secret *
Sulfuric acid, compd. with graphite	12777-87-6	1 - 10
SILANE	2530-83-8	< 2.5 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

Allergic skin reaction (redness, swelling, blistering, and itching).

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

Condition

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

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
Calcium Carbonate	1317-65-3	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
GLASS BUBBLES	65997-17-3	Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m ³ ;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m ³	
TIN, INORGANIC COMPOUNDS, EXCEPT OXIDES	7488-55-3	OSHA	TWA(as Sn):2 mg/m ³	
PHOSPHOROUS	7723-14-0	OSHA	TWA:0.1 mg/m ³	
Phosphorus, mol. (P4)	7723-14-0	ACGIH	TWA:0.1 mg/m ³	

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:

Safety Glasses with side shields
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.

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

Physical state
Color

Liquid
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/cm³

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
Hazardous Air Pollutants
Percent volatile

No Data Available
No Data Available
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>
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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	Rat	LD50 > 2,000 mg/kg
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 A	Dermal	Rat	LD50 > 1,600 mg/kg
EPOXY RESIN A	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
PHOSPHOROUS	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
PHOSPHOROUS	Ingestion	Rat	LD50 > 15,000 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Calcium Carbonate	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

EPOCHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Rabbit	Irritant
GLASS BUBBLES	Professional judgement	No significant irritation
EPOXY DILUENT	In vitro data	Irritant
EPOXY RESIN A	Rabbit	Mild irritant
PHENOL-FORMALDEHYDE POLYMER	Rabbit	Minimal irritation
PHOSPHOROUS	Rabbit	No significant irritation
Calcium Carbonate	Rabbit	No significant irritation
SILANE	Rabbit	Mild irritant
STANNOUS SULFATE	Professional judgement	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
EPOCHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Rabbit	No significant irritation
GLASS BUBBLES	Professional judgement	No significant irritation
EPOXY DILUENT	In vitro data	No significant irritation
EPOXY RESIN A	Rabbit	Moderate irritant
PHENOL-FORMALDEHYDE POLYMER	Rabbit	Mild irritant
PHOSPHOROUS	Rabbit	No significant irritation
Calcium Carbonate	Rabbit	No significant irritation
SILANE	Rabbit	Corrosive
STANNOUS SULFATE	Professional judgement	Corrosive

Skin Sensitization

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

Respiratory Sensitization

Name	Species	Value
EPOXY RESIN A	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
EPOCHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	In vivo	Not mutagenic

EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	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
EPOXY DILUENT	In vivo	Not mutagenic
EPOXY DILUENT	In Vitro	Some positive data exist, but the data are not sufficient for classification
EPOXY RESIN A	In vivo	Not mutagenic
EPOXY RESIN A	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
PHOSPHOROUS	In Vitro	Not mutagenic
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 A	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 A	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
EPOXY RESIN A	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
EPOXY RESIN A	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
EPOXY RESIN A	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
Calcium Carbonate	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	prematuring & 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
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EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
EPOXY DILUENT	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Calcium Carbonate	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
EPICHLOROHYDRIN-PHENOL-FORMALDEHYDE RESIN	Ingestion	heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 250 mg/kg/day	13 weeks
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 A	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
EPOXY RESIN A	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
EPOXY RESIN A	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
Calcium Carbonate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
SILANE	Ingestion	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
STANNOUS SULFATE	Ingestion	hematopoietic system liver heart kidney and/or	Not classified	Rat	NOAEL 40 mg/kg/day	4 weeks

		bladder				
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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 completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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):

Ingredient

PHOSPHOROUS (Phosphorus, mol. (P4))

C.A.S. No

7723-14-0

% by Wt

Trade Secret <= 10

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.

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