



## Safety Data Sheet

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### Product identifier

3M™ Scotch-Weld™ Void Filling Compound EC-3515 B/A FR Black (SoS US)

### Recommended use

Structural Void Filling Compound

### 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:**

43-5824-8, 43-5480-9

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### SECTION 1: Identification

#### 1.1. Product identifier

EC-3515 B/A FR (SoS US) Part A

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

##### Recommended use

Part A of 2-part structural void filling compound for Aerospace applications

#### 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

Acute Toxicity (oral): Category 4.  
 Serious Eye Damage/Irritation: Category 1.  
 Skin Corrosion/Irritation: Category 2.  
 Skin Sensitizer: Category 1A.  
 Specific Target Organ Toxicity (single exposure): Category 3.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Corrosion | Exclamation mark |

##### Pictograms

**Hazard Statements**

Harmful if swallowed.  
 Causes serious eye damage.  
 Causes skin irritation.  
 May cause an allergic skin reaction.  
 May cause drowsiness or dizziness.

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

Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves and eye/face protection.  
 Do not eat, drink or smoke when using this product.  
 Wash thoroughly after handling.  
 Contaminated work clothing must not be allowed out of the workplace.

**Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 IF ON SKIN: Wash with plenty of soap and water.  
 Immediately call a POISON CENTER or doctor/physician.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 Take off contaminated clothing and wash it before reuse.  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
 Rinse mouth.  
 Call a POISON CENTER or doctor/physician if you feel unwell.

**Storage:**

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.

**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.

1% of the mixture consists of ingredients of unknown acute dermal toxicity.  
 92% of the mixture consists of ingredients of unknown acute inhalation toxicity.

## SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
FATTY ACIDS, C18-UNSATD., DIMERS,	68911-25-1	50 - 60 Trade Secret *

POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]		
Oxide glass chemicals	65997-17-3	20 - 30
Ammonium Polyphosphate	68333-79-9	< 15 Trade Secret *
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	< 10 Trade Secret *
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	4246-51-9	< 3 Trade Secret *
BIS[(DIMETHYLAMINO)METHYL]PHENOL	71074-89-0	< 2 Trade Secret *
Melamine CH2O Resin	9003-08-1	< 1
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	<= 1

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation:**

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

**Skin Contact:**

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

**Eye Contact:**

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

**If Swallowed:**

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

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

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).

### 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

None inherent in this product.

### Hazardous Decomposition or By-Products

**Substance**

Amine Compounds  
Carbon monoxide  
Carbon dioxide  
Ammonia

**Condition**

During Combustion  
During Combustion  
During Combustion  
During Combustion

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

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.

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

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

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

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. 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. 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
Oxide glass chemicals	65997-17-3	Manufacturer determined	TWA(as non-fibrous, respirable)(8 hours):3 mg/m3;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m3	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists  
 AIHA : American Industrial Hygiene Association  
 CMRG : Chemical Manufacturer's Recommended Guidelines  
 OSHA : United States Department of Labor - Occupational Safety and Health Administration  
 TWA: Time-Weighted-Average  
 STEL: Short Term Exposure Limit  
 CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

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

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

- 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. 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

Solid

Color

White

Specific Physical Form:

Paste

Odor

Amine

Odor threshold

No Data Available

pH

No Data Available

Melting point

No Data Available

Boiling Point

No Data Available

Flash Point

>=100 °C

Evaporation rate

Not Applicable

Flammability (solid, gas)

Not Classified

Flammable Limits(LEL)

Not Applicable

Flammable Limits(UEL)

Not Applicable

Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Density	$\leq 0.48 \text{ g/cm}^3$
Specific Gravity	<i>No Data Available</i>
Solubility in Water	<i>No Data Available</i>
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	<i>No Data Available</i>
VOC Less H <sub>2</sub> O & Exempt Solvents	<i>No Data Available</i>

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat

### 10.5. Incompatible materials

Strong acids

Strong oxidizing agents

### 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:

May be 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.

**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:**

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.

**Additional Health Effects:**

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

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	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >5 - =12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >300 - =2,000 mg/kg
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Dermal	Rat	LD50 > 2,000 mg/kg
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Ingestion	Rat	LD50 > 2,000 mg/kg
Oxide glass chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Oxide glass chemicals	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Ammonium Polyphosphate	Dermal	Rat	LD50 > 5,000 mg/kg
Ammonium Polyphosphate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.85 mg/l
Ammonium Polyphosphate	Ingestion	Rat	LD50 > 300, < 2,000 mg/kg
2,4,6-Tris(dimethylaminomethyl)phenol	Dermal	Rat	LD50 1,280 mg/kg
2,4,6-Tris(dimethylaminomethyl)phenol	Ingestion	Rat	LD50 1,000 mg/kg
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Dermal	Rabbit	LD50 2,525 mg/kg
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Ingestion	Rat	LD50 2,850 mg/kg
BIS[(DIMETHYLAMINO)METHYL]PHENOL	Ingestion		LD50 estimated to be 300 - 2,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg



Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Melamine CH2O Resin	Dermal	Rabbit	LD50 > 10,000 mg/kg
Melamine CH2O Resin	Ingestion	Rat	LD50 > 10,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Overall product	In vitro data	Irritant
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Rat	Irritant
Oxide glass chemicals	Professional judgement	No significant irritation
Ammonium Polyphosphate	In vitro data	No significant irritation
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Rabbit	Corrosive
BIS[(DIMETHYLAMINO)METHYL]PHENOL	similar compounds	Corrosive
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	In vitro data	Severe irritant
Oxide glass chemicals	Professional judgement	No significant irritation
Ammonium Polyphosphate	Rabbit	Moderate irritant
2,4,6-Tris(dimethylaminomethyl)phenol	Rabbit	Corrosive
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Rabbit	Corrosive
BIS[(DIMETHYLAMINO)METHYL]PHENOL	similar compounds	Corrosive
Siloxanes and Silicones, di-Me, reaction products with silica	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Guinea pig	Sensitizing
Ammonium Polyphosphate	similar compounds	Not classified
2,4,6-Tris(dimethylaminomethyl)phenol	Guinea pig	Not classified
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Professional judgement	Sensitizing
Siloxanes and Silicones, di-Me, reaction products with silica	Human and animal	Not classified
Melamine CH2O Resin	Human	Sensitizing

**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
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDILOXY)]BIS[1-PROPANAMINE]	In Vitro	Not mutagenic
Oxide glass chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,4,6-Tris(dimethylaminomethyl)phenol	In Vitro	Not mutagenic
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	In Vitro	Not mutagenic
Siloxanes and Silicones, di-Me, reaction products with silica	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Oxide glass chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Siloxanes and Silicones, di-Me, reaction products with silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
Melamine CH2O Resin	Ingestion	Multiple animal species	Not carcinogenic

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDILOXY)]BIS[1-PROPANAMINE]	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	prematuring into lactation
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDILOXY)]BIS[1-PROPANAMINE]	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	29 days
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDILOXY)]BIS[1-PROPANAMINE]	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	prematuring into lactation
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Ingestion	Not classified for female reproduction	Rat	NOAEL 600 mg/kg/day	prematuring into lactation
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Ingestion	Not classified for male reproduction	Rat	NOAEL 600 mg/kg/day	59 days
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GYCOL	Ingestion	Not classified for development	Rat	NOAEL 600 mg/kg/day	prematuring into lactation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Melamine CH2O Resin	Ingestion	Not classified for female reproduction	Rat	NOAEL 10% in the diet	1 generation
Melamine CH2O Resin	Ingestion	Not classified for development	Rat	NOAEL 10% in the diet	1 generation
Melamine CH2O Resin	Ingestion	Not classified for male reproduction	Dog	LOAEL 2.5% in the diet	2 years

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	Irritation Positive	
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL Not available	
Ammonium Polyphosphate	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
2,4,6-Tris(dimethylaminomethyl)phenol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
BIS(3-AMINOPROPYL)ETHER OF DIETHYLENE GYCOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Melamine CH2O Resin	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL not available	

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
FATTY ACIDS, C18-UNSATD., DIMERS, POLYMERS WITH 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS[1-PROPANAMINE]	Ingestion	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   vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	29 days
Oxide glass chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
2,4,6-Tris(dimethylaminomethyl)phenol	Dermal	skin   liver   nervous system   auditory system   hematopoietic system   eyes	Not classified	Rat	NOAEL 125 mg/kg/day	28 days
BIS(3-AMINOPROPYL)ETHER OF DIETHYLENE GYCOL	Ingestion	gastrointestinal tract   heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system	Not classified	Rat	NOAEL 600 mg/kg/day	59 days
Siloxanes and Silicones, di-Me, reaction products with silica	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Melamine CH2O Resin	Inhalation	hematopoietic	Not classified	Rat	NOAEL	28 days

		system   liver   immune system   nervous system   kidney and/or bladder			0.036 mg/l	
Melamine CH2O Resin	Inhalation	respiratory system	Not classified	Rat	LOAEL 0.036 mg/l	28 days
Melamine CH2O Resin	Inhalation	eyes	Not classified	Rat	NOAEL 0.036 mg/l	28 days
Melamine CH2O Resin	Ingestion	endocrine system   hematopoietic system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	2 years

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information**

**Ecotoxicological information**

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

**Chemical fate information**

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

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

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

Dispose of 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. 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): Not regulated

**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**

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.

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## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

EC-3515 B/A FR Black (SoS) US Part B

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

##### Recommended use

Part B of 2-part structural void filling compound for Aerospace applications

#### 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 2B.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 2.

#### 2.2. Label elements

##### Signal word

Warning

##### Symbols

Exclamation mark | Health Hazard |

##### Pictograms



**Hazard Statements**

Causes eye irritation.  
 May cause an allergic skin reaction.  
 Suspected of causing cancer.

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

Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Wear protective gloves.  
 Wash thoroughly after handling.  
 Contaminated work clothing must not be allowed out of the workplace.

**Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical advice/attention.  
 IF ON SKIN: Wash with plenty of soap and water.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 Wash contaminated clothing before reuse.  
 IF exposed or concerned: Get medical advice/attention.

**Storage:**

Store locked up.

**Disposal:**

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

80% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

Ingredient	C.A.S. No.	% by Wt
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	25085-99-8	20 - 60 Trade Secret *
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	25068-38-6	20 - 60 Trade Secret *
OXIDE GLASS CHEMICALS	65997-17-3	20 - 25
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	32588-76-4	10 - 15
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	14228-73-0	< 9 Trade Secret *
Carbon Black	1333-86-4	1 - 2 Trade Secret *
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	67762-90-7	<= 1

\*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:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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**

None inherent in this product.

**Hazardous Decomposition or By-Products****Substance**

Aldehydes  
Carbon monoxide  
Carbon dioxide  
Hydrogen Bromide  
Hydrogen Chloride  
Hydrogen Cyanide  
Oxides of Nitrogen

**Condition**

During Combustion  
During Combustion  
During Combustion  
During Combustion  
During Combustion  
During Combustion  
During Combustion

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

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.

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

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with

applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. 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. Use personal protective equipment (gloves, respirators, etc.) as required.

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

Store away from heat.

## 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
Carbon Black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m <sup>3</sup>	A3: Confirmed animal carcin.
Carbon Black	1333-86-4	OSHA	TWA:3.5 mg/m <sup>3</sup>	
OXIDE GLASS CHEMICALS	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>	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m <sup>3</sup>	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

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

#### 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

Solid

Color

Black

Specific Physical Form:

Paste

Odor

Epoxy

Odor threshold

*No Data Available*

pH

*No Data Available*

Melting point

*No Data Available*

Boiling Point

*No Data Available*

Flash Point

$\geq 100$  °C

Evaporation rate

*Not Applicable*

Flammability (solid, gas)

Not Classified

Flammable Limits(LEL)

*Not Applicable*

Flammable Limits(UEL)

*Not Applicable*

Vapor Pressure

*Not Applicable*

Vapor Density

*Not Applicable*

Density

0.5 - 0.52 g/cm<sup>3</sup>

Specific Gravity

0.5 - 0.52

Solubility in Water

*No Data Available*

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*

Volatile Organic Compounds

*No Data Available*

Percent volatile

*No Data Available*

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

*No Data Available*

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Heat

Sparks and/or flames

#### 10.5. Incompatible materials

None known.

#### 10.6. Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

#### 11.1. Information on Toxicological effects

##### Signs and Symptoms of Exposure

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

##### Inhalation:

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

May cause additional health effects (see below).

##### Skin Contact:

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

##### Eye Contact:

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

##### Ingestion:

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

##### Additional Health Effects:

##### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Carbon black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

### 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	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Dermal	Rat	LD50 > 1,600 mg/kg
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Ingestion	Rat	LD50 > 1,000 mg/kg
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	Dermal	Rat	LD50 > 1,600 mg/kg
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	Ingestion	Rat	LD50 > 1,000 mg/kg
OXIDE GLASS CHEMICALS	Dermal		LD50 estimated to be > 5,000 mg/kg
OXIDE GLASS CHEMICALS	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	Dermal	Rabbit	LD50 > 2,000 mg/kg
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 51 mg/l
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	Ingestion	Rat	LD50 > 7,500 mg/kg
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Dermal	Rabbit	LD50 > 2,000 mg/kg
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.19 mg/l
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Ingestion	Rat	LD50 1,098 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Dermal	Rabbit	LD50 > 5,000 mg/kg
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Ingestion	Rat	LD50 > 5,110 mg/kg

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

Name	Species	Value
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Rabbit	Mild irritant
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	Rabbit	Mild irritant
OXIDE GLASS CHEMICALS	Professional judgement	No significant irritation
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	Rabbit	No significant irritation
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In vitro data	Irritant
Carbon Black	Rabbit	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Rabbit	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Rabbit	Moderate irritant

4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Rabbit	Moderate irritant
OXIDE GLASS CHEMICALS	Professional judgement	No significant irritation
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	Rabbit	No significant irritation
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In vitro data	No significant irritation
Carbon Black	Rabbit	No significant irritation
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Human and animal	Sensitizing
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Human and animal	Sensitizing
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Mouse	Sensitizing
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Human and animal	Not classified

**Respiratory Sensitization**

Name	Species	Value
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Human	Not classified
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Human	Not classified

**Germ Cell Mutagenicity**

Name	Route	Value
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	In vivo	Not mutagenic
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	In Vitro	Some positive data exist, but the data are not sufficient for classification
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	In vivo	Not mutagenic
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	In Vitro	Some positive data exist, but the data are not sufficient for classification
OXIDE GLASS CHEMICALS	In Vitro	Some positive data exist, but the data are not sufficient for classification
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	In Vitro	Not mutagenic
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In vivo	Not mutagenic
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	In Vitro	Some positive data exist, but the data are not sufficient for classification
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
OXIDE GLASS CHEMICALS	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic
Siloxanes and Silicones, di-Me, reaction products with silica	Not	Mouse	Some positive data exist, but the data are not

(nanomaterial)	Specified	sufficient for classification
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**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation
N,N'-ETHYLENEBIS(TETRABROMOPHTHALIMIDE)	Ingestion	Not classified for development	Multiple animal species	NOAEL 1,000 mg/kg/day	during organogenesis
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Ingestion	Not classified for female reproduction	Rat	NOAEL 300 mg/kg/day	prematuring into lactation
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Ingestion	Not classified for male reproduction	Rat	NOAEL 300 mg/kg/day	33 days
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Ingestion	Not classified for development	Rat	NOAEL 300 mg/kg/day	prematuring into lactation
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	Ingestion	auditory system   heart   endocrine	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days

diglycidyl ether polymer		system   hematopoietic system   liver   eyes   kidney and/or bladder			mg/kg/day	
4,4'-ISOPROPYLIDENEDIPH ENOL-EPICHLOROHYDRIN POLYMER	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
4,4'-ISOPROPYLIDENEDIPH ENOL-EPICHLOROHYDRIN POLYMER	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4,4'-ISOPROPYLIDENEDIPH ENOL-EPICHLOROHYDRIN POLYMER	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
OXIDE GLASS CHEMICALS	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
N,N'-ETHYLENEBIS(TETRAB ROMOPHTHALIMIDE)	Ingestion	heart   endocrine system   hematopoietic system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	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
Carbon Black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Siloxanes and Silicones, di-Me, reaction products with silica (nanomaterial)	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

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

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

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

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

**Chemical fate information**

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

**SECTION 13: Disposal considerations**



**13.1. Disposal methods**

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

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.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**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**

Carcinogenicity

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

**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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