



**3M General Offices**  
3M Center  
St. Paul, MN 55144-1000  
1-800-364-3577 or (651) 737-6501 (24 hours)

## Safety Data Sheet

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Purchase Order #: 41857  
Customer Number: 0026098914  
Edd Kirby  
HISCO-ROGERS  
13000 WILFRED LN N  
ROGERS, MN 55374-4637  
USA

Dear Edd Kirby

Enclosed is the Safety Data Sheet (SDS)\* for the product that your company recently purchased from 3M.

Please forward the attached document(s) to the individual in your organization responsible for hazard communication.

If you are a distributor and resell this product, OSHA and EPA require that you transmit this SDS information to your customers at the time of first shipment or whenever you receive revised SDSs from 3M.

3M SDSs are available over the Internet at [www.3m.com/MSDSSearch](http://www.3m.com/MSDSSearch).

3M is committed to meeting our customer requirements. Please contact your 3M customer service or sales representative if you have any questions. If you do not know whom to contact, please call the 3M Product Information Center at 1-800-364-3577.

**If you are not currently receiving 3M SDSs by e-mail and would like to do so, please contact our eSDS Administrator at [emsdsadmin@mmm.com](mailto:emsdsadmin@mmm.com)**

\*An Article Information Sheet (AIS) or Article Information Letter (AIL) may be enclosed in place of an SDS if the product is an article which does not require an SDS under the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.



## Safety Data Sheet

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<b>Issue Date:</b>	01/06/23	<b>Supersedes Date:</b>	09/26/22

### SECTION 1: Identification

**1.1. Product identifier**  
3M(TM)Fire Barrier Putty Sleeves

**Product Identification Numbers**  
98-0400-5594-3, 98-0400-5596-8, 98-0400-5597-6  
7000145572, 7000145571, 7000145570

**1.2. Recommended use and restrictions on use**

**Recommended use**  
Passive fire protection in industrial applications

**1.3. Supplier’s details**

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

**1.4. Emergency telephone number**  
1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

**2.1. Hazard classification**  
Serious Eye Damage/Irritation: Category 2A.  
Reproductive Toxicity: Category 2.  
Germ Cell Mutagenicity: Category 2.

**2.2. Label elements**

**Signal word**  
Warning

**Symbols**  
Exclamation mark | Health Hazard |

**Pictograms**

**Hazard Statements**

Causes serious eye irritation.  
 Suspected of damaging fertility or the unborn child.  
 Suspected of causing genetic defects.

**Precautionary Statements****General:**

Keep out of reach of children.

**Prevention:**

Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Wear protective gloves and eye/face protection.  
 Wash thoroughly after handling.

**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 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.

4% of the mixture consists of ingredients of unknown acute oral toxicity.  
 4% of the mixture consists of ingredients of unknown acute dermal toxicity.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Zinc Borate 2335	138265-88-0	< 25 Trade Secret *
Petrolatum	8009-03-8	10 - 20 Trade Secret *
Polyisobutylene	9003-27-4	10 - 20 Trade Secret *
Sodium Silicate	1344-09-8	< 20 Trade Secret *
Styrene-Butadiene Polymer	9003-55-8	10 - 20 Trade Secret *
Melamine Phosphate	41583-09-9	1 - 10 Trade Secret *
Oxide Glass Chemicals	65997-17-3	1 - 10 Trade Secret *
Butadiene-Styrene-Meta-Divinylbenzene Polymer	26471-45-4	1 - 5 Trade Secret *
Alpha-Methylstyrene-Isoamylene-Piperylene Polymer	62258-49-5	< 3 Trade Secret *
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	25036-25-3	< 3 Trade Secret *
Fatty Acids, C14-18 and C16-C18-Unsatd.	67701-06-8	< 3 Trade Secret *
Regenerated Cellulose	68442-85-3	< 3 Trade Secret *
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	< 3 Trade Secret *
Water	7732-18-5	< 3 Trade Secret *
Rayon Fiber	None	< 3 Trade Secret *

Iron Oxide	1309-37-1	< 1 Trade Secret *
Potassium Rosinate	61790-50-9	< 1 Trade Secret *
Rosin	8050-09-7	< 1 Trade Secret *
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxythrocinnamate)	41484-35-9	< 1 Trade Secret *
Rubber	Trade Secret*	< 1 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:

Wash with soap and water. 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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

### 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 Chloride

#### 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. 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**

Keep out of reach of children. 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. Avoid release to the environment. Use personal protective equipment (gloves, respirators, etc.) as required.

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

No special storage requirements.

**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
SILICA, AMORPHOUS	112945-52-5	OSHA	TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3	
Iron Oxide	1309-37-1	ACGIH	TWA(respirable fraction):5 mg/m3	A4: Not class. as human carcin
Iron Oxide	1309-37-1	OSHA	TWA(as fume):10 mg/m3	
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	
MINERAL OILS, HIGHLY-REFINED OILS	8009-03-8	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcin
Paraffin oil	8009-03-8	OSHA	TWA(as mist):5 mg/m3	
Rosin	8050-09-7	ACGIH	TWA(as Resin, inhalable fraction):0.001 mg/m3	Dermal/Respiratory Sensitizer

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

#### 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

Red

Specific Physical Form:

Putty

Odor

Odorless

Odor threshold

*No Data Available*

pH

*No Data Available*

Melting point

*Not Applicable*

Boiling Point

*Not Applicable*

Flash Point

Flash point > 93 °C (200 °F)

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

1.25 g/cm<sup>3</sup>

Specific Gravity

1.25 [Ref Std:WATER=1]

Solubility In Water

*No Data Available*

Solubility- non-water

*No Data Available*

Partition coefficient: n-octanol/ water

*No Data Available*

Autoignition temperature

*Not Applicable*

Decomposition temperature

*No Data Available*

Viscosity	No Data Available
Molecular weight	No Data Available
Volatile Organic Compounds	< 1 % weight
VOC Less H2O & Exempt Solvents	< 1 g/l

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

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.

#### Skin Contact:

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

#### Eye Contact:

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

#### Ingestion:

May be harmful if swallowed.

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

May cause additional health effects (see below).

#### Additional Health Effects:

#### Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

#### Genotoxicity:

Genotoxicity and Mutagenicity: May interact with genetic material and possibly alter gene expression.

#### 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
Zinc Borate 2335	Dermal	Rabbit	LD50 > 5,000 mg/kg
Zinc Borate 2335	Inhalation-Dust/Mist	Rat	LC50 > 4.95 mg/l
Zinc Borate 2335	Ingestion	Rat	LD50 > 5,000 mg/kg
Sodium Silicate	Dermal	Rabbit	LD50 > 4,640 mg/kg
Sodium Silicate	Ingestion	Rat	LD50 500 mg/kg
Petrolatum	Dermal		LD50 estimated to be > 5,000 mg/kg
Petrolatum	Ingestion	Rat	LD50 > 5,000 mg/kg
Styrene-Butadiene Polymer	Dermal	Rabbit	LD50 > 2,000 mg/kg
Styrene-Butadiene Polymer	Ingestion	Rat	LD50 > 5,000 mg/kg
Polyisobutylene	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyisobutylene	Ingestion	Rat	LD50 > 2,000 mg/kg
Melamine Phosphate	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Melamine Phosphate	Ingestion	Rat	LD50 > 4,000 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
Butadiene-Styrene-Meta-Divinylbenzene Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Butadiene-Styrene-Meta-Divinylbenzene Polymer	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Rat	LD50 > 5,110 mg/kg
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	Rat	LD50 > 1,600 mg/kg
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Rat	LD50 > 1,000 mg/kg
Alpha-Methylstyrene-Isoamylene-Piperylene Polymer	Dermal		LD50 estimated to be > 5,000 mg/kg
Alpha-Methylstyrene-Isoamylene-Piperylene Polymer	Ingestion	Rat	LD50 > 40,000 mg/kg
Fatty Acids, C14-18 and C16-C18-Unsatd.	Ingestion	Rat	LD50 > 2,000 mg/kg
Fatty Acids, C14-18 and C16-C18-Unsatd.	Dermal	similar compounds	LD50 > 2,000 mg/kg
Iron Oxide	Dermal	Not available	LD50 3,100 mg/kg
Iron Oxide	Ingestion	Not available	LD50 3,700 mg/kg
Rosin	Dermal	Rabbit	LD50 > 2,500 mg/kg
Rosin	Ingestion	Rat	LD50 7,600 mg/kg
Rubber	Dermal		LD50 estimated to be > 5,000 mg/kg



Rubber	Ingestion		LD50 estimated to be > 5,000 mg/kg
Potassium Rosinate	Dermal	Rat	LD50 > 2,000 mg/kg
Potassium Rosinate	Ingestion	Rat	LD50 > 2,000 mg/kg
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	Dermal	Rabbit	LD50 > 3,000 mg/kg
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	Inhalation-Vapor (4 hours)	Rat	LC50 > 6.3 mg/l
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Zinc Borate 2335	Rabbit	No significant irritation
Sodium Silicate	Rabbit	Corrosive
Styrene-Butadiene Polymer	Professional judgement	No significant irritation
Polyisobutylene	Rabbit	No significant irritation
Oxide Glass Chemicals	Professional judgement	No significant irritation
Butadiene-Styrene-Meta-Divinylbenzene Polymer	Professional judgement	Minimal irritation
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Rabbit	No significant irritation
Fatty Acids, C14-18 and C16-C18-Unsatd.	similar compounds	No significant irritation
Iron Oxide	Rabbit	No significant irritation
Rosin	Rabbit	No significant irritation
Rubber	Rabbit	No significant irritation
Potassium Rosinate	Rabbit	No significant irritation
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	Human	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Zinc Borate 2335	Rabbit	Severe irritant
Sodium Silicate	Rabbit	Corrosive
Polyisobutylene	Rabbit	No significant irritation
Oxide Glass Chemicals	Professional judgement	No significant irritation
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Rabbit	Mild irritant
Fatty Acids, C14-18 and C16-C18-Unsatd.	similar compounds	Mild irritant
Iron Oxide	Rabbit	No significant irritation
Rosin	Rabbit	Mild irritant
Rubber	Professional judgement	No significant irritation
Potassium Rosinate	Rabbit	Moderate irritant
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
Zinc Borate 2335	Guinea pig	Not classified
Sodium Silicate	Mouse	Not classified
Synthetic amorphous silica, fumed, crystalline-free	Human and animal	Not classified
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Guinea pig	Not classified
Fatty Acids, C14-18 and C16-C18-Unsatd.	similar compounds	Not classified
Iron Oxide	Human	Not classified
Rosin	Guinea pig	Sensitizing
Potassium Rosinate	Mouse	Not classified
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	Human and animal	Not classified

**Respiratory Sensitization**

Name	Species	Value
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Human	Not classified
Rosin	Human	Not classified

**Germ Cell Mutagenicity**

Name	Route	Value
Zinc Borate 2335	In Vitro	Some positive data exist, but the data are not sufficient for classification
Zinc Borate 2335	In vivo	Mutagenic
Sodium Silicate	In Vitro	Not mutagenic
Sodium Silicate	In vivo	Not mutagenic
Oxide Glass Chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
Synthetic amorphous silica, fumed, crystalline-free	In Vitro	Not mutagenic
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	In vivo	Not mutagenic
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Fatty Acids, C14-18 and C16-C18-Unsatd.	In Vitro	Not mutagenic
Iron Oxide	In Vitro	Not mutagenic
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	In Vitro	Not mutagenic
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxyhydrocinnamate)	In vivo	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
Synthetic amorphous silica, fumed, crystalline-free	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Iron Oxide	Inhalation	Human	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
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					<b>Duration</b>
Zinc Borate 2335	Ingestion	Toxic to male reproduction	Rat	NOAEL 100 mg/kg/day	92 days
Zinc Borate 2335	Ingestion	Toxic to development	Rat	LOAEL 100 mg/kg/day	during gestation
Sodium Silicate	Ingestion	Not classified for development	Mouse	NOAEL 200 mg/kg/day	during gestation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Zinc Borate 2335	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Sodium Silicate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
Potassium Rosinate	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
Zinc Borate 2335	Inhalation	immune system   respiratory system   heart   endocrine system   hematopoietic system   liver   nervous system   kidney and/or bladder	Not classified	Rat	NOAEL 0.15 mg/l	2 weeks
Zinc Borate 2335	Ingestion	endocrine system   liver   kidney and/or bladder   heart   skin   bone, teeth, nails, and/or hair   hematopoietic system   immune system   nervous system   eyes   respiratory system   vascular system	Not classified	Rat	NOAEL 375 mg/kg/day	92 days
Sodium Silicate	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 2,400 mg/kg/day	4 weeks
Sodium Silicate	Ingestion	endocrine system	Not classified	Rat	NOAEL 804	3 months

		blood			mg/kg/day	
Sodium Silicate	Ingestion	heart   liver	Not classified	Rat	NOAEL 1,259 mg/kg/day	8 weeks
Oxide Glass Chemicals	Inhalation	respiratory system	Not classified	Human	NOAEL not available	occupational exposure
Synthetic amorphous silica, fumed, crystalline-free	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer	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
Iron Oxide	Inhalation	pulmonary fibrosis   pneumoconiosis	Not classified	Human	NOAEL Not available	occupational exposure
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxythrocinnamate)	Ingestion	liver	Not classified	Rat	NOAEL 500 mg/kg/day	90 days
Thiodiethylene Bis(3,5-Di-Tert-Butyl-4-Hydroxythrocinnamate)	Ingestion	heart   endocrine system   bone marrow   hematopoietic system   immune system   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 1,500 mg/kg/day	90 days

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information**

**Ecotoxicological information**

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

**Chemical fate information**

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

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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

Germ cell mutagenicity

Reproductive toxicity

Serious eye damage or eye irritation

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

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Zinc Borate 2335 (ZINC COMPOUNDS)	138265-88-0	Trade Secret < 25

#### 15.2. State Regulations

Contact 3M for more information.

#### 15.3. Chemical Inventories

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

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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