# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

075825559

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

075825583

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075825500 075825518 075825526 075825534 075825542 075825567 075825575



# Safety Data Sheet

Copyright,2015,3M Company.

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

 Document Group:
 24-8564-7
 Version Number:
 4.00

 Issue Date:
 03/05/15
 Supercedes Date:
 09/18/12

# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> ESPE<sup>TM</sup> PROTEMP<sup>TM</sup> PLUS BASE PASTE

### **Product Identification Numbers**

LE-F100-0544-1. LE-F100-0714-9

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

## Recommended use

Dental Material, Temporary crown and bridge material

### Restrictions on use

For use only by dental professionals

#### 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** 3M ESPE Dental Products

**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**

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

# 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

### Signal word

Not applicable.

#### **Symbols**

Not applicable.

Page 1 of 8

#### **Pictograms**

Not applicable.

#### 2.3. Hazards not otherwise classified

None.

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

Ingredient	C.A.S. No.	% by Wt
DIMETHACRYLATE (BISEMA6)	41637-38-1	50 - 60 Trade Secret *
SILANE TREATED AMORPHOUS SILICA	None	20 - 30 Trade Secret *
REACTION PRODUCTS OF 1,6-	1101874-33-2	10 - 15 Trade Secret *
DIISOCYANATOHEXANE WITH 2-[(2-		
METHACRYLOYL)ETHYL]6-		
HYDROXYHEXANOATE AND 2-HYDROXYETHYL		
METHACRYLATE (DESMA)		
SILANE TREATED SILICA	68909-20-6	5 - 10 Trade Secret *

<sup>\*</sup>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.

### **Eve 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

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

Material will not burn. Non-combustible. Use a fire fighting agent suitable for surrounding fire.

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

None inherent in this product.

# Hazardous Decomposition or By-Products

Substance

**Condition** 

Carbon monoxide Carbon dioxide Irritant Vapors or Gases During Combustion
During Combustion
During Combustion

## 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

# **SECTION 6: Accidental release measures**

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

Ventilate the area with fresh air. Observe precautions from other sections.

#### **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.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

## 7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store away from heat.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

# 8.2. Exposure controls

### 8.2.1. Engineering controls

Use with appropriate local exhaust ventilation.

#### 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

#### Skin/hand protection

See Section 7.1 for additional information on skin protection.

Page 3 of 8

#### Respiratory protection

None required.

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

9.1. Information on basic physical and chemical properties

**General Physical Form:**Specific Physical Form:

Solid Paste
Paste

Odor, Color, Grade: tooth colored paste, slight acrylic odor

**Odor threshold** No Data Available Not Applicable pН **Melting point** No Data Available **Boiling Point** No Data Available **Flash Point** Not Applicable **Evaporation rate** No Data Available Flammability (solid, gas) Not Classified Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable No Data Available **Vapor Pressure Vapor Density** No Data Available 1.3 - 1.4 g/cm3 **Density** 

**Specific Gravity** 1.3 - 1.4 [*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 **Volatile Organic Compounds** Not Applicable Not Applicable Percent volatile **VOC Less H2O & Exempt Solvents** Not Applicable

# **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

None known.

# 10.6. Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

None known.

Page 4 of 8

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.

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure. The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

## 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:**

Contact with the skin during product use is not expected to result in significant irritation.

#### **Eye Contact**:

Contact with the eyes during product use is not expected to result in significant irritation. Vapors released during curing may cause 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.

## **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	Ingestion		No data available; calculated ATE > 5,000 mg/kg
DIMETHACRYLATE (BISEMA6)	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
DIMETHACRYLATE (BISEMA6)	Ingestion	Rat	LD50 > 2,000 mg/kg
REACTION PRODUCTS OF 1,6-DIISOCYANATOHEXANE WITH 2-[(2-METHACRYLOYL)ETHYL]6- HYDROXYHEXANOATE AND 2-HYDROXYETHYL METHACRYLATE (DESMA)	Ingestion	Rat	LD50 > 2,000 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l

SILANE TREATED SILICA Ingestion Rat LD50 > 5,110 mg/kg
--

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
REACTION PRODUCTS OF 1,6-DIISOCYANATOHEXANE WITH 2-[(2-METHACRYLOYL)ETHYL]6-HYDROXYHEXANOATE AND 2-HYDROXYETHYL METHACRYLATE (DESMA)	Rabbit	Minimal irritation
SILANE TREATED SILICA	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	Rabbit	Mild irritant
REACTION PRODUCTS OF 1,6-DIISOCYANATOHEXANE WITH 2-[(2- METHACRYLOYL)ETHYL]6-HYDROXYHEXANOATE AND 2- HYDROXYETHYL METHACRYLATE (DESMA)	In vitro data	No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation

## **Skin Sensitization**

Name	Species	Value
DIMETHACRYLATE (BISEMA6)	Guinea	Not sensitizing
	pig	
REACTION PRODUCTS OF 1,6-DIISOCYANATOHEXANE WITH 2-[(2-	Mouse	Not sensitizing
METHACRYLOYL)ETHYL]6-HYDROXYHEXANOATE AND 2-		
HYDROXYETHYL METHACRYLATE (DESMA)		
SILANE TREATED SILICA	Human	Not sensitizing
	and	
	animal	

# **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
DIMETHACRYLATE (BISEMA6)	In Vitro	Not mutagenic
REACTION PRODUCTS OF 1,6-DIISOCYANATOHEXANE WITH 2-[(2- METHACRYLOYL)ETHYL]6-HYDROXYHEXANOATE AND 2- HYDROXYETHYL METHACRYLATE (DESMA)	In Vitro	Not mutagenic
SILANE TREATED SILICA	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
SILANE TREATED SILICA	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
SILANE TREATED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s

# Target Organ(s)

## Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
SILANE TREATED	Inhalation	respiratory system	All data are negative	Human	NOAEL Not	occupational
SILICA		silicosis			available	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.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

# **SECTION 14: Transport Information**

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

# **SECTION 15: Regulatory information**

### 15.1. US Federal Regulations

Contact 3M for more information.

# 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

#### 15.2. State Regulations

Contact 3M for more information.

# 15.3. Chemical Inventories

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated

Page 7 of 8

by the FDA.

Contact 3M for more information.

# 15.4. International Regulations

Contact 3M for more information.

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

## **SECTION 16: Other information**

**NFPA Hazard Classification** 

Health: 1 Flammability: 0 Instability: 0 Special Hazards: None

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

 Document Group:
 24-8564-7
 Version Number:
 4.00

 Issue Date:
 03/05/15
 Supercedes Date:
 09/18/12

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

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

3M USA SDSs are available at www.3M.com



# Safety Data Sheet

Copyright,2015,3M Company.

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

 Document Group:
 24-8557-1
 Version Number:
 3.01

 Issue Date:
 05/18/15
 Supercedes Date:
 02/06/15

# **SECTION 1: Identification**

#### 1.1. Product identifier

3MTM ESPETM PROTEMPTM PLUS CATALYST PASTE

#### **Product Identification Numbers**

LE-F100-0543-9. LE-F100-0714-8

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

## Recommended use

Dental Material, Temporary crown and bridge material

### Restrictions on use

For use only by dental professionals

#### 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** 3M ESPE Dental Products

**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**

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

## 2.1. Hazard classification

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (central nervous system): Category 3.

### 2.2. Label elements

#### Signal word

Warning

#### **Symbols**

Exclamation mark |

Page 1 of 9

#### **Pictograms**



## **Hazard Statements**

May cause an allergic skin reaction. May cause drowsiness or dizziness.

## **Precautionary Statements**

## **Prevention:**

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only in a well-ventilated area.

Wear protective gloves.

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: Wash with plenty of soap and water.

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

Wash contaminated clothing before reuse.

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

# **Storage:**

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

#### **Disposal:**

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

#### 2.3. Hazards not otherwise classified

None.

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

Ingredient	C.A.S. No.	% by Wt
ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-	19224-29-4	70 - 80 Trade Secret *
PHENYLENEOXY)]BIS-, DIACETATE		
BENZYL-PHENYL-BARBITURIC ACID	72846-00-5	5 - 15 Trade Secret *
SILANE TREATED SILICA	68909-20-6	5 - 15 Trade Secret *
TERT-BUTYL PEROXY-3,5,5-	13122-18-4	< 0.4 Trade Secret *
TRIMETHYLHEXANOATE		

<sup>\*</sup>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:**

Page 2 of 9

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

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

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

None inherent in this product.

#### **Hazardous Decomposition or By-Products**

Substance

Carbon monoxide Carbon dioxide Irritant Vapors or Gases

## **Condition**

During Combustion
During Combustion
During Combustion

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

No special protective actions for fire-fighters are anticipated.

# **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. 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.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Page 3 of 9

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. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove.

## 7.2. Conditions for safe storage including any incompatibilities

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

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

#### 8.2. Exposure controls

### 8.2.1. Engineering controls

Use in a well-ventilated area.

## 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

# Skin/hand protection

See Section 7.1 for additional information on skin protection.

# Respiratory protection

None required.

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

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

General Physical Form: Solid Specific Physical Form: Paste

Odor, Color, Grade: white, paste, slight acridic odor

Odor threshold No Data Available Not Applicable pН **Melting point** No Data Available **Boiling Point** No Data Available Flash Point No flash point **Evaporation rate** No Data Available Flammability (solid, gas) Not Classified Flammable Limits(LEL) No Data Available Flammable Limits(UEL) No Data Available Vapor Pressure No Data Available **Vapor Density** No Data Available **Density** 1.2 - 1.3 g/cm3

Page 4 of 9

**Specific Gravity** 1.2 - 1.3 [*Ref Std:* WATER=1]

Solubility in Water Negligible

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data AvailableViscosityNo Data AvailablePercent volatileNo Data Available

# **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

Heat

## 10.5. Incompatible materials

None known.

# 10.6. Hazardous decomposition products

**Substance** Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

The information below represents toxicological information associated with the individual components of the uncured

The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

## 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:

Page 5 of 9

#### **Inhalation:**

This product may have a characteristic odor; however, no adverse health effects are anticipated.

#### **Skin Contact:**

May be harmful in contact with skin.

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

### **Eye Contact:**

Contact with the eyes during product use is not expected to result in significant irritation.

### **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:**

## 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.

## **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 2,000 - 5,000
			mg/kg
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000
			mg/kg
ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-	Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
PHENYLENEOXY)]BIS-, DIACETATE		nal	
		judgeme	
		nt	
ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-	Ingestion	Rat	LD50 > 2,000 mg/kg
PHENYLENEOXY)]BIS-, DIACETATE			
BENZYL-PHENYL-BARBITURIC ACID	Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
		nal	
		judgeme	
	<b>_</b>	nt	
BENZYL-PHENYL-BARBITURIC ACID	Ingestion	Rat	LD50 > 2,000 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
SILANE TREATED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Dermal	Rat	LD50 > 2,000 mg/kg
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Inhalation-	Rat	LC50 > 0.8  mg/l
	Dust/Mist		
	(4 hours)		
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Ingestion	Rat	LD50 12,905 mg/kg

 $\overline{ATE}$  = acute toxicity estimate

#### Skin Corrosion/Irritation

Skill Collosion/Il Hatton						
Name	Species	Value				
SILANE TREATED SILICA	Rabbit	No significant irritation				
TERT-BUTYL PEROXY-3.5.5-TRIMETHYLHEXANOATE	Rabbit	No significant irritation				

Serious Eye Damage/Irritation

Name	Species	Value
SILANE TREATED SILICA	Rabbit	No significant irritation
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Rabbit	No significant irritation

# **Skin Sensitization**

Name	Species	Value
BENZYL-PHENYL-BARBITURIC ACID	Mouse	Not sensitizing
SILANE TREATED SILICA	Human	Not sensitizing
	and	
	animal	
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Guinea	Sensitizing
	pig	

## **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

Name  ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-		Value
ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1- PHENYLENEOXY)]BIS-, DIACETATE	In Vitro	Not mutagenic
BENZYL-PHENYL-BARBITURIC ACID	In Vitro	Not mutagenic
SILANE TREATED SILICA	In Vitro	Not mutagenic

Carcinogenicity

our emogeniery						
Name SII ANE TREATED SII ICA		Species	Value			
SILANE TREATED SILICA		Mouse	Some positive data exist, but the data are not			
	Specified		sufficient for classification			

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
SILANE TREATED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ETHANOL, 2,2'-[(1- METHYLETHYLIDENE) BIS(4,1- PHENYLENEOXY)]BIS-, DIACETATE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 2,000 mg/kg	
BENZYL-PHENYL- BARBITURIC ACID	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,000 mg/kg	

Specific Target Organ Toxicity - repeated exposure

Specific Target Organ Toxicity - repeated exposure								
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration		
						Duration		
SILANE TREATED	Inhalation	respiratory system	All data are negative	Human	NOAEL Not	occupational		

SILICA	silicosis		available	exposure

# **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

# **Ecotoxicological information**

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

#### **Chemical fate information**

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

# **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

Incinerate in a permitted waste incineration facility.

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.

# 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

#### 15.2. State Regulations

Contact 3M for more information.

## 15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

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.

 Document Group:
 24-8557-1
 Version Number:
 3.01

 Issue Date:
 05/18/15
 Supercedes Date:
 02/06/15

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

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

3M USA SDSs are available at www.3M.com