

## **Safety Data Sheet**

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 Document Group:
 29-0309-4
 Version Number:
 1.01

 Issue Date:
 04/15/15
 Supercedes Date:
 03/09/11

**Product identifier** 

3M<sup>TM</sup>ESPE<sup>TM</sup>Protemp<sup>TM</sup> Plus Intro Kit A2 NA

**ID** Number(s):

70-2011-3741-4

Recommended use

Dental Product, Temporization material.

Restrictions on use

For use only by dental professionals.

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)

**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:

24-8564-7, 18-0582-9, 18-0590-2, 24-8557-1, 27-9483-2

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3M <sup>TM</sup> ESPE <sup>TM</sup> Protemp <sup>TM</sup> Plus Intro Kit	t A2 NA	04/15/15
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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



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 Document Group:
 27-9483-2
 Version Number:
 4.07

 Issue Date:
 02/17/22
 Supercedes Date:
 06/08/21

## **SECTION 1: Identification**

## 1.1. Product identifier

3M<sup>TM</sup> Filtek<sup>TM</sup> Supreme Flowable Restorative

#### **Product Identification Numbers**

 $70-2010-7758-6, 70-2010-7759-4, 70-2010-7760-2, 70-2010-7761-0, 70-2010-7762-8, 70-2010-7763-6, 70-2010-7764-4, 70-2010-7765-1, 70-2010-7766-9, 70-2010-7767-7, 70-2010-7768-5, 70-2010-7769-3, 70-2010-7771-9\\ 7000128929, 7000128930, 7000128932, 7000128931, 7000128933, 7000128934, 7000128935, 7000128936, 7000128937, 7000128938, 7000128939, 7000128940, 7000128941$ 

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

#### Recommended use

Dental product, Composite restorative material

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

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

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

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.

Reproductive Toxicity: Category 1B.

#### 2.2. Label elements

Signal word

## Danger

## **Symbols**

Exclamation mark | Health Hazard |





#### **Hazard Statements**

May cause an allergic skin reaction. May damage fertility or the unborn child.

#### **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.

Contaminated work clothing must not be allowed out of the workplace.

## Response:

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.

#### Disposal:

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

1% of the mixture consists of ingredients of unknown acute oral toxicity.

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

Ingredient	C.A.S. No.	% by Wt
Silane Treated Ceramic	444758-98-9	50 - 60 Trade Secret *
Substituted Dimethacrylate	27689-12-9	15 - 25 Trade Secret *
Bisphenol A Diglycidyl Ether Dimethacrylate	1565-94-2	5 - 10 Trade Secret *
(BISGMA)		
Silane Treated Silica	248596-91-0	5 - 10 Trade Secret *
Triethylene Glycol Dimethacrylate (TEGDMA)	109-16-0	< 10 Trade Secret *
Poly[oxy(1-oxo-1,6-hexanediyl)], $\alpha,\alpha'$ -(oxydi-2,1-	220182-22-9	1 - 5 Trade Secret *
ethanediyl)bis[ $\omega$ -[[[[2-[(2-methyl-1-oxo-2-propen-1-		
yl)oxy]ethyl]amino]carbonyl]oxy]-		
Ytterbium Fluoride (YbF3)	13760-80-0	1 - 5 Trade Secret *
N,N-DIMETHYLBENZOCAINE	10287-53-3	< 0.3 Trade Secret *
Diphenyliodonium Hexafluorophosphate	58109-40-3	< 0.2 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:**

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

#### **Eye Contact:**

No need for first aid is anticipated.

#### 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**

<u>Substance</u> Carbon monoxide Carbon dioxide

#### Condition

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

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. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. 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. Wash contaminated clothing before reuse. Do not get in eyes. 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
FLUORIDES	13760-80-0	ACGIH	TWA(as F):2.5 mg/m3	A4: Not class. as human
				carcin
FLUORIDES	13760-80-0	OSHA	TWA(as F):2.5	
			mg/m3;TWA(as dust):2.5	
			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 in a well-ventilated area.

## 8.2.2. Personal protective equipment (PPE)

#### **Eve/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

**Appearance** 

Physical state Solid Color Tooth

**Specific Physical Form:** Paste

Odor Slight Acrylate **Odor threshold** No Data Available Not Applicable nН Melting point No Data Available **Boiling Point** Not Applicable **Flash Point** No flash point **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

Specific Gravity 1.5 [Ref Std:WATER=1]

1.5 g/cm3

Solubility in Water Negligible **Solubility- non-water** No Data Available Partition coefficient: n-octanol/ water Not Applicable **Autoignition temperature** No Data Available **Decomposition temperature** No Data Available No Data Available Viscosity Molecular weight No Data Available **VOC Less H2O & Exempt Solvents** No Data Available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

**Density** 

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

**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 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:

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

#### **Skin Contact:**

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.

#### **Eve 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:**

#### Reproductive/Developmental Toxicity:

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

#### **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 >2,000 - ≤5,000 mg/kg
Silane Treated Ceramic	Dermal		LD50 estimated to be > 5,000 mg/kg
Silane Treated Ceramic	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Substituted Dimethacrylate	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Substituted Dimethacrylate	Ingestion	Rat	LD50 > 17,600 mg/kg
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	Dermal	Professio nal judgeme	LD50 estimated to be > 5,000 mg/kg

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		nt	
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	Ingestion	Rat	LD50 > 11,700 mg/kg
Triethylene Glycol Dimethacrylate (TEGDMA)	Dermal	Professio nal	LD50 estimated to be > 5,000 mg/kg
		judgeme	
		nt	
Triethylene Glycol Dimethacrylate (TEGDMA)	Ingestion	Rat	LD50 10,837 mg/kg
Silane Treated Silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Silane Treated Silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
Ytterbium Fluoride (YbF3)	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Ytterbium Fluoride (YbF3)	Ingestion	Rat	LD50 > 5,000 mg/kg
N,N-DIMETHYLBENZOCAINE	Dermal	Rat	LD50 > 2,000 mg/kg
N,N-DIMETHYLBENZOCAINE	Ingestion	Rat	LD50 > 2,000 mg/kg
Diphenyliodonium Hexafluorophosphate	Ingestion	Rat	LD50 32 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Silane Treated Ceramic	similar compoun ds	No significant irritation
Substituted Dimethacrylate	Rabbit	No significant irritation
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	Rabbit	No significant irritation
Triethylene Glycol Dimethacrylate (TEGDMA)	Guinea	Mild irritant
Silane Treated Silica	pıg Professio	Niift-iit-ti
Shane Treated Sinca	nal	No significant irritation
	judgeme	
	nt	
N,N-DIMETHYLBENZOCAINE	Rabbit	No significant irritation
Diphenyliodonium Hexafluorophosphate	Rabbit	No significant irritation

**Serious Eye Damage/Irritation** 

Name	Species	Value
Silane Treated Ceramic	similar compoun ds	Mild irritant
Substituted Dimethacrylate	Rabbit	Mild irritant
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	In vitro data	No significant irritation
Triethylene Glycol Dimethacrylate (TEGDMA)	Professio nal judgeme nt	Moderate irritant
Silane Treated Silica	Professio nal judgeme nt	No significant irritation
Ytterbium Fluoride (YbF3)	Professio nal judgeme nt	Mild irritant
N,N-DIMETHYLBENZOCAINE	Rabbit	No significant irritation
Diphenyliodonium Hexafluorophosphate	Rabbit	Mild irritant

## **Skin Sensitization**

Name	Species	Value
Silane Treated Ceramic	similar	Not classified
	compoun	

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	ds	
Substituted Dimethacrylate	Guinea	Not classified
	pig	
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	Mouse	Not classified
Triethylene Glycol Dimethacrylate (TEGDMA)	Human	Sensitizing
	and	
	animal	
N,N-DIMETHYLBENZOCAINE		Not classified

## **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

Name	Route	Value
Substituted Dimethacrylate	In Vitro	Not mutagenic
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	In Vitro	Not mutagenic
Triethylene Glycol Dimethacrylate (TEGDMA)	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
N,N-DIMETHYLBENZOCAINE	In vivo	Not mutagenic
N,N-DIMETHYLBENZOCAINE	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
Diphenyliodonium Hexafluorophosphate	In Vitro	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Silane Treated Ceramic	Inhalation	similar compoun ds	Some positive data exist, but the data are not sufficient for classification
Triethylene Glycol Dimethacrylate (TEGDMA)	Dermal	Mouse	Not carcinogenic

## **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
Triethylene Glycol Dimethacrylate (TEGDMA)	Ingestion	Not classified for female reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
Triethylene Glycol Dimethacrylate (TEGDMA)	Ingestion	Not classified for male reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
Triethylene Glycol Dimethacrylate (TEGDMA)	Ingestion	Not classified for development	Mouse	NOAEL 1 mg/kg/day	1 generation
N,N-DIMETHYLBENZOCAINE	Ingestion	Not classified for female reproduction	Rat	NOAEL 600 mg/kg/day	premating into lactation
N,N-DIMETHYLBENZOCAINE	Ingestion	Not classified for development	Rat	NOAEL 50 mg/kg/day	premating into lactation
N,N-DIMETHYLBENZOCAINE	Ingestion	Toxic to male reproduction	Rat	NOAEL 50 mg/kg/day	53 days

## Target Organ(s)

Specific Target Organ Toxicity - single exposure

Specific Turget Organ	ronnerej s	ingic exposure				
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Diphenyliodonium Hexafluorophosphate	Inhalation	respiratory irritation	Not classified	Not available	Irritation Equivocal	

Specific Target Organ Toxicity - repeated exposure

Name Route Target Organ(s)	Value	Species	Test Result	Exposure
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						Duration
Silane Treated Ceramic	Inhalation	pulmonary fibrosis	Not classified	similar compoun ds	NOAEL Not available	
Bisphenol A Diglycidyl Ether Dimethacrylate (BISGMA)	Ingestion	endocrine system   hematopoietic system   liver   heart   skin   gastrointestinal tract   bone, teeth, nails, and/or hair   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
Triethylene Glycol Dimethacrylate (TEGDMA)	Dermal	kidney and/or bladder   blood	Not classified	Mouse	NOAEL 833 mg/kg/day	78 weeks
N,N- DIMETHYLBENZOCAIN E	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 74 mg/kg/day	28 days
N,N- DIMETHYLBENZOCAIN E	Ingestion	liver   heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system	Not classified	Rat	NOAEL 900 mg/kg/day	28 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 completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

## **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

Reproductive toxicity

Respiratory or Skin Sensitization

#### **Additional TSCA Information**

Components	CAS No	Additional Information
Silane Treated Silica	248596-91-0	Allowed use(s): Coating additive.

## 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 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.

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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.

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## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<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:** Oral Care Solutions Division

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

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

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

Specific Target Organ Toxicity (repeated exposure): Category 2.

#### 2.2. Label elements

## Signal word

Warning

#### **Symbols**

Health Hazard |

## **Pictograms**



#### **Hazard Statements**

May cause damage to organs through prolonged or repeated exposure: respiratory system

## **Precautionary Statements**

#### **Prevention:**

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

#### **Response:**

Get medical advice/attention if you feel unwell.

#### Disposal

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

#### 2.3. Hazards not otherwise classified

Repeated exposure may cause skin dryness or cracking.

24% of the mixture consists of ingredients of unknown acute oral toxicity.

24% of the mixture consists of ingredients of unknown acute dermal toxicity.

103% of the mixture consists of ingredients of unknown acute inhalation toxicity.

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

Ingredient	C.A.S. No.	% by Wt
Dimethacrylate (BISEMA6)	41637-38-1	45 - 55 Trade Secret *
Silane treated Silica	2968358-00-9	20 - 30 Trade Secret *
Methacrylated Polyurethan	1101874-33-2	10 - 15 Trade Secret *
Silane treated Silica	68909-20-6	5 - 15 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.

#### **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

Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

#### 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**

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring 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 prolonged or repeated skin contact. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

## 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	<b>Additional Comments</b>
SILICA, AMORPHOUS	68909-20-6	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 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

**Appearance** 

Physical stateSolid PasteColorTooth

Specific Physical Form: Paste

OdorSlight AcrylicOdor thresholdNo Data AvailablePHNot ApplicableMelting pointNo Data AvailableBoiling PointNo Data AvailableFlash PointNo flash pointEvaporation rateNo Data Available

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapor Pressure

No Data Available

No Data Available

No Data Available

\_\_\_\_\_

**Density** 1.3 - 1.4 g/cm<sup>3</sup>

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 Molecular weight No Data Available **Volatile Organic Compounds** Not Applicable Percent volatile Not Applicable **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

Substance

None known.

**Condition** 

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:

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

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#### Inhalation:

May cause additional health effects (see below).

#### **Skin Contact:**

Prolonged or repeated exposure may cause: Dermal Defatting: Signs/symptoms may include localized redness, itching, drying and cracking of skin.

#### **Eye Contact:**

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

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

#### **Additional Health Effects:**

## Prolonged or repeated exposure may cause target organ effects:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

### **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 >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Dimethacrylate (BISEMA6)	Dermal	Rat	LD50 > 2,000 mg/kg
Dimethacrylate (BISEMA6)	Ingestion	Rat	LD50 > 2,000 mg/kg
Methacrylated Polyurethan	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Methacrylated Polyurethan	Ingestion	Rat	LD50 > 2,000 mg/kg
Silane treated Silica	Ingestion	Rat	LD50 > 2,000 mg/kg
Silane treated Silica	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value		
Dimethacrylate (BISEMA6)	In vitro data	No significant irritation		
Methacrylated Polyurethan	Rabbit	Minimal irritation		
Silane treated Silica	Rabbit	No significant irritation		

#### Serious Eye Damage/Irritation

Name	Species	Value
Overall product	Rabbit	Mild irritant
Dimethacrylate (BISEMA6)	In vitro	No significant irritation
	data	
Methacrylated Polyurethan	In vitro	No significant irritation
	data	
Silane treated Silica	Rabbit	No significant irritation

#### **Skin Sensitization**

Name	Species	Value
Dimethacrylate (BISEMA6)	Multiple	Not classified
	animal	
	species	
Methacrylated Polyurethan	Mouse	Not classified
Silane treated Silica	Guinea	Not classified
	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	Route	Value
Dimethacrylate (BISEMA6)	In Vitro	Not mutagenic
Methacrylated Polyurethan	In Vitro	Not mutagenic
Silane treated Silica	In Vitro	Not mutagenic

## Carcinogenicity

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

## Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Dimethacrylate (BISEMA6)	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Dimethacrylate (BISEMA6)	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Dimethacrylate (BISEMA6)	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
Silane treated Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silane treated Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation

## 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
Dimethacrylate (BISEMA6)	Ingestion	hematopoietic system   liver   immune system   kidney and/or bladder   endocrine system   eyes	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Silane treated Silica	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 0.035 mg/l	13 weeks
Silane treated Silica	Inhalation	hematopoietic system   kidney and/or bladder	Not classified	Rat	NOAEL 0.035 mg/l	13 weeks
Silane treated Silica	Ingestion	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	5 weeks

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#### **Aspiration Hazard**

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

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

## **SECTION 12: Ecological information**

### **Ecotoxicological information**

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

#### **Chemical fate information**

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

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

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**

Hazard Not Otherwise Classified (HNOC)

Specific target organ toxicity (single or repeated exposure)

## 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 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: 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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 24-8557-1
 Version Number:
 6.00

 Issue Date:
 03/18/22
 Supercedes Date:
 02/07/18

## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Protemp<sup>TM</sup> 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:** Oral Care Solutions Division

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

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

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.

## **Pictograms**

Not applicable.

6% of the mixture consists of ingredients of unknown acute oral toxicity.

6% of the mixture consists of ingredients of unknown acute dermal toxicity.

## **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 *
(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-	None	1 - 10 Trade Secret *
ethanediyl)(1-phenylenoxy-		
2,2'ethoxyethanediyl)bisacetate		
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:

No need for first aid is anticipated.

#### **Skin Contact:**

Wash with soap and water. If you feel unwell, 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

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

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**

Condition

Page 2 of 9 Carbon monoxide Carbon dioxide Irritant Vapors or Gases 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 prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

#### 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	<b>Additional Comments</b>
SILICA, AMORPHOUS	68909-20-6	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 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

**Appearance** 

Physical state Solid Color White

Paste **Specific Physical Form:** 

Odor Slight Acidic **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** 

**Specific Gravity** 1.2 - 1.3 [*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 Molecular weight No Data Available Percent volatile No 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

1.2 - 1.3 g/cm<sup>3</sup>

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 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:

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.

#### **Eve 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.

#### **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

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			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	
THE TEST ESTITIBLE , BITTER THE		judgeme	
		nt	
ETHANOL 221 (1 METHAL ETHAL IDENE) DIG(4.1	Y 4'	L	I D 50 > 2 000 //
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	
		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

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-	In vitro	No significant irritation
PHENYLENEOXY)]BIS-, DIACETATE	data	
SILANE TREATED SILICA	Rabbit	No significant irritation
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Rabbit	No significant irritation

**Serious Eye Damage/Irritation** 

Name		Value
ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-	In vitro	No significant irritation
PHENYLENEOXY)]BIS-, DIACETATE	data	
SILANE TREATED SILICA	Rabbit	No significant irritation
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Rabbit	No significant irritation

## **Skin Sensitization**

Name	Species	Value
ETHANOL, 2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-	Mouse	Not classified
PHENYLENEOXY)]BIS-, DIACETATE		
BENZYL-PHENYL-BARBITURIC ACID	Mouse	Not classified
SILANE TREATED SILICA	Human	Not classified
	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	Route	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

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## 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 classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for 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
BENZYL-PHENYL-	Ingestion	nervous system	Not classified	Rat	NOAEL	
BARBITURIC ACID		-			2,000 mg/kg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
SILANE TREATED SILICA	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 waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility.

## **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**

Not applicable

## 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: 0 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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 04/05/18

## **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> RELYX<sup>TM</sup> Temp NE Base Paste

## **Product Identification Numbers**

ID Number UPC ID Number UPC

LE-FBAS-5666-1

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

#### Recommended use

Dental Material, Temporary luting material

Restrictions on use

For use only by dental professionals

#### 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

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

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

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.

#### **Pictograms**

Not applicable.

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

Ingredient	C.A.S. No.	% by Wt
ZINC OXIDE	1314-13-2	80 - 90 Trade Secret *
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	5 - 15 Trade Secret *
PETROLATUM	8009-03-8	1 - 5 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:**

No need for first aid is anticipated.

#### **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

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

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**

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring 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

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 prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

#### 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	<b>Additional Comments</b>
ZINC OXIDE	1314-13-2 ACGIH		TWA(respirable fraction):2	
			mg/m3;STEL(respirable	
			fraction):10 mg/m3	
ZINC OXIDE	1314-13-2	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3;TWA(as	
			fume):5 mg/m3	
MINERAL OILS, HIGHLY-	8009-03-8	ACGIH	TWA(inhalable fraction):5	A4: Not class. as human
REFINED OILS			mg/m3	carcin
Paraffin oil	8009-03-8	OSHA	TWA(as mist):5 mg/m3	
MINERAL OILS, HIGHLY-	8042-47-5	ACGIH	TWA(inhalable fraction):5	A4: Not class. as human
REFINED OILS			mg/m3	carcin
Paraffin oil	8042-47-5	OSHA	TWA(as mist):5 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

Page 3 of

#### 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

**Appearance** 

Physical state Solid Color White

**Specific Physical Form:** Paste **Odor** Odorless

**Odor threshold** No Data Available pН Not Applicable Melting point Not Applicable **Boiling Point** Not Applicable Flash Point No flash point **Evaporation rate** Not Applicable 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

Specific Gravity > 1 [Ref Std:WATER=1]

Solubility in Water Nil

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water Not Applicable **Autoignition temperature** No Data Available **Decomposition temperature** No Data Available Viscosity No Data Available Molecular weight No Data Available **Volatile Organic Compounds** No Data Available **VOC Less H2O & 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

#### 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.

## 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:**

No known health effects.

#### **Skin Contact:**

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

#### Eve Contact:

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

#### **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
ZINC OXIDE	Dermal		LD50 estimated to be > 5,000 mg/kg
ZINC OXIDE	Inhalation- Dust/Mist	Rat	LC50 > 5.7 mg/l

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	(4 hours)		
ZINC OXIDE	Ingestion	Rat	LD50 > 5,000 mg/kg
WHITE MINERAL OIL (PETROLEUM)	Dermal	Rabbit	LD50 > 2,000 mg/kg
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Rat	LD50 > 5,000 mg/kg
PETROLATUM	Dermal		LD50 estimated to be > 5,000 mg/kg
PETROLATUM	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
ZINC OXIDE	Human and animal	No significant irritation
WHITE MINERAL OIL (PETROLEUM)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
ZINC OXIDE	Rabbit	Mild irritant
WHITE MINERAL OIL (PETROLEUM)	Rabbit	Mild irritant

## **Skin Sensitization**

Name	Species	Value
ZINC OXIDE	Guinea	Not classified
	pig	
WHITE MINERAL OIL (PETROLEUM)	Guinea	Not classified
	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	Route	Value				
ZINC OXIDE	In Vitro	Some positive data exist, but the data are not sufficient for classification				
ZINC OXIDE	In vivo	Some positive data exist, but the data are not sufficient for classification				
WHITE MINERAL OIL (PETROLEUM)	In Vitro	Not mutagenic				

Carcinogenicity

Name	Route	Species	Value
WHITE MINERAL OIL (PETROLEUM)	Dermal	Mouse	Not carcinogenic
WHITE MINERAL OIL (PETROLEUM)	Inhalation	Multiple animal	Not carcinogenic
		species	

## Reproductive Toxicity

Reproductive and/or Developmental Effects

reproductive und/or Developmental Effects					
Name	Route	Value	Species	Test Result	Exposure
					Duration
ZINC OXIDE	Ingestion	Not classified for reproduction and/or	Multiple	NOAEL 125	premating &
		development	animal	mg/kg/day	during
		_	species		gestation
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Not classified for female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Not classified for male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Not classified for development	Rat	NOAEL 4,350	during

		l mg/kg/dav	gestation
		mg/kg/uay	gestation

## 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
ZINC OXIDE	Ingestion	nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	10 days
ZINC OXIDE	Ingestion	endocrine system   hematopoietic system   kidney and/or bladder	Not classified	Other	NOAEL 500 mg/kg/day	6 months
WHITE MINERAL OIL (PETROLEUM)	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,381 mg/kg/day	90 days
WHITE MINERAL OIL (PETROLEUM)	Ingestion	liver   immune system	Not classified	Rat	NOAEL 1,336 mg/kg/day	90 days

**Aspiration Hazard** 

Name	Value
WHITE MINERAL OIL (PETROLEUM)	Aspiration hazard

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

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

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

## **Chemical fate information**

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

# **SECTION 13: Disposal considerations**

### 13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, 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.

#### **EPCRA 311/312 Hazard Classifications:**

Physical	Hazards
----------	---------

Not applicable

### **Health Hazards**

Not applicable

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

Ingredient

ZINC OXIDE (ZINC COMPOUNDS)

C.A.S. No

% by W

Trade Secret 80 - 90

## 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.

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.

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: 0 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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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.

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## **Safety Data Sheet**

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 04/05/18

## **SECTION 1: Identification**

### 1.1. Product identifier

3M™ESPE™ RELYX™ TEMP NE NP CATALYST PASTE

**Product Identification Numbers** 

ID Number UPC ID Number UPC

LE-FCAT-5666-1

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

Recommended use

Dental Material, Temporary luting material

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

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

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

### 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

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

Serious Eye Damage/Irritation: Category 2A. Skin Sensitizer: Category 1B.

### 2.2. Label elements

Signal word

Warning

## **Symbols**

Exclamation mark |

### **Pictograms**



### **Hazard Statements**

Causes serious eye irritation.

May cause an allergic skin reaction.

### **Precautionary Statements**

#### **Prevention:**

Wear protective gloves and eye/face protection.

Wear eye/face protection.

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.

### Disposal:

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

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

Ingredient	C.A.S. No.	% by Wt
ROSIN, REACTION PRODUCTS WITH ACRYLIC	83137-13-7	60 - 70 Trade Secret *
ACID		
NONANOIC ACID	112-05-0	30 - 40 Trade Secret *
SILANE TREATED SILICA	68909-20-6	1 - 5 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:**

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

### **Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

#### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

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

### 5.1. Suitable extinguishing media

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

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

None inherent in this product.

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

SubstanceConditionFormaldehydeDuring CombustionCarbon monoxideDuring CombustionCarbon dioxideDuring 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 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. Do not get in eyes. 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 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	<b>Additional Comments</b>
SILICA, AMORPHOUS	68909-20-6	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

### 8.2.1. Engineering controls

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:**Specific Physical Form:
Paste

**Odor, Color, Grade:** slight aromatic odor, yellow, transparent paste

Odor threshold
PH
No Data Available
Not Applicable
Not Applicable
Not Applicable
Not Applicable
No Data Available
No Data Available

02/04/19

Flash PointNo flash pointEvaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableVapor PressureNo Data AvailableVapor DensityNo Data Available

Specific Gravity > 1 [Ref Std:WATER=1]

Solubility In Water No Data Available

Solubility in Water Nil

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water Not Applicable **Autoignition temperature** No Data Available **Decomposition temperature** No Data Available Viscosity > 10,000 centipoise Molecular weight No Data Available **Volatile Organic Compounds** No Data Available Percent volatile No Data Available **VOC Less H2O & Exempt Solvents** No 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
None known.

Condition

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:

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

#### **Skin Contact:**

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.

### **Eve Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired 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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
ROSIN, REACTION PRODUCTS WITH ACRYLIC ACID	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
ROSIN, REACTION PRODUCTS WITH ACRYLIC ACID	Ingestion	Rat	LD50 > 2,000 mg/kg
NONANOIC ACID	Dermal	Rat	LD50 > 2,000  mg/kg
NONANOIC ACID	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

SKIII CUTTUSIUII/III ITAAUUII						
Name	Species	Value				
Overall product	Rabbit	Minimal irritation				
ROSIN, REACTION PRODUCTS WITH ACRYLIC ACID	Professio	Irritant				
	nal					
	judgeme					
	nt					
NONANOIC ACID	Rabbit	Irritant				
SILANE TREATED SILICA	Rabbit	No significant irritation				

Serious Eye Damage/Irritation

Name	Species	Value
ROSIN, REACTION PRODUCTS WITH ACRYLIC ACID	In vitro	No significant irritation
	data	
NONANOIC ACID	similar	Corrosive
	health	
	hazards	
SILANE TREATED SILICA	Rabbit	No significant irritation

### **Skin Sensitization**

Name	Species	Value
ROSIN, REACTION PRODUCTS WITH ACRYLIC ACID	In vitro	Sensitizing
	data	
NONANOIC ACID	Mouse	Not classified
SILANE TREATED SILICA	Human	Not classified
	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
ROSIN, REACTION PRODUCTS WITH ACRYLIC ACID	In Vitro	Not mutagenic
SILANE TREATED SILICA	In Vitro	Not mutagenic

Carcinogenicity

Name		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 classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for 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	Not classified	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.

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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. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

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

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 new substance notification requirements of CEPA.

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.

02/04/19

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.

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