

# **Material Safety Data Sheet**

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**PRODUCT NAME:** 3M<sup>TM</sup> ESPE<sup>TM</sup> IMPRINT<sup>TM</sup> 4 PRELIMINARY PENTA<sup>TM</sup> Value Pack

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

**Issue Date:** 03/04/14 **Supercedes Date:** Initial Issue

**Document Group:** 33-1541-3

### **ID** Number(s):

70-2011-4182-0

This product is a kit or a multipart product which consists of multiple, independently packaged components. An SDS for each of these components is included. Please do not separate the component SDSs from this cover page. The document numbers of the SDSs for components of this product are:

33-0041-5, 33-0045-6

No revision information is available.

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MATERIAL SAFETY DATA SHEET 3M <sup>TM</sup> ESPE <sup>TM</sup> IMPRINT <sup>TM</sup> 4 PRELIMINARY PENTA <sup>TM</sup> Value Pack 03/04/14
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# **Safety Data Sheet**

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3.00 **Document Group:** 33-0041-5 **Version Number:** 10/09/14 05/12/14 **Issue Date: Supercedes Date:** 

# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> ESPE<sup>TM</sup> IMPRINT<sup>TM</sup> 4 PRELIMINARY PENTA<sup>TM</sup> Base

### **Product Identification Numbers**

LE-F100-1515-6

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

#### Recommended use

Dental Product, Impression 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 1-888-3M HELPS (1-888-364-3577) **Telephone:** 

## 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.

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### **Pictograms**

Not applicable.

### 2.3. Hazards not otherwise classified

None.

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

Ingredient	C.A.S. No.	% by Wt
SILANE TREATED QUARTZ	None	40 - 60 Trade Secret *
POLY(DIMETHYLSILOXANE)	63148-62-9	10 - 30 Trade Secret *
FLUX CALCINED DIATOMACEOUS EARTH	68855-54-9	10 - 20 Trade Secret *
VINYL-POLYDIMETHYL SILOXANE	68083-19-2	10 - 20 Trade Secret *
CRISTOBALITE	14464-46-1	< 10 Trade Secret *
SILANE TREATED SILICA	67762-90-7	1 - 10 Trade Secret *
DIMETHYL METHYL HYDROGEN SILICONE	68037-59-2	1 - 10 Trade Secret *
FLUID		
ALUMINUM OXIDE	1344-28-1	< 5 Trade Secret *
SODIUM OXIDE	1313-59-3	< 2 Trade Secret *
Oils, mint, Mentha arvensis piperascenssis, var.	68917-18-0	< 0.1 Trade Secret *
piperascens, Labiatae.		

<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 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

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. Vacuum or sweep up. WARNING! A motor could be an ignition source and cause flammable gases or vapors or dust in the spill area to burn or explode. 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

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

# 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

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

# 8.1. Control parameters

# Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1	A4: Not class. as human
			mg/m3	carcin
ALUMINUM OXIDE	1344-28-1	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3	
ALUMINUM OXIDE	1344-28-1	CMRG	TWA:1 fiber/cc	
CRISTOBALITE	14464-46-1	OSHA	TWA concentration(as total	
			dust):0.15 mg/m3;TWA	
			concentration(respirable):0.05	
			mg/m3(1.2 millions of	

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			particles/cu. ft.)	
CRISTOBALITE	14464-46-1	ACGIH	TWA(respirable A2: Suspected hum	
			fraction):0.025 mg/m3	carcin.
SILANE TREATED SILICA	67762-90-7	CMRG	CEIL:5 mg/m3	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	
SILICA, AMORPHOUS	68855-54-9	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:** 

Odor, Color, Grade: Smell of mint, pink colored paste

**Odor threshold** No Data Available pН Not Applicable **Melting point** Not Applicable **Boiling Point** Not Applicable

Flash point > 93 °C (200 °F) **Flash Point** 

No Data Available **Evaporation rate** Not Classified Flammability (solid, gas) Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable **Vapor Pressure** No Data Available **Vapor Density** No Data Available **Density** 1.5 g/cm3 - 1.7 g/cm3

**Specific Gravity** 1.5 - 1.7 [*Ref Std:* WATER=1]

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Solubility in Water Negligible

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water No Data Available **Autoignition temperature** Not Applicable **Decomposition temperature** No Data Available No Data Available Viscosity **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

Amines Strong acids Strong bases Strong oxidizing agents

### 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:**

No health effects are expected.

### **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.

#### Ingestion:

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

### Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use: Contains a chemical or chemicals which can cause cancer.

Ingredient	C.A.S. No.	Class Description	Regulation
SILICA, CRYS AIRRESP	14464-46-1	Known human carcinogen	National Toxicology Program Carcinogens
CRISTOBALITE	14464-46-1	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

## **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

# **Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
POLY(DIMETHYLSILOXANE)	Dermal	Rabbit	LD50 > 19,400 mg/kg
POLY(DIMETHYLSILOXANE)	Ingestion	Rat	LD50 > 17,000 mg/kg
VINYL-POLYDIMETHYL SILOXANE	Dermal	Rabbit	LD50 > 15,440 mg/kg
VINYL-POLYDIMETHYL SILOXANE	Ingestion	Rat	LD50 > 15,440 mg/kg
FLUX CALCINED DIATOMACEOUS EARTH	Dermal	Rabbit	LD50 > 5,000 mg/kg
FLUX CALCINED DIATOMACEOUS EARTH	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
FLUX CALCINED DIATOMACEOUS EARTH	Ingestion	Rat	LD50 > 5,110 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
DIMETHYL METHYL HYDROGEN SILICONE FLUID	Dermal	Rabbit	LD50 > 2,000 mg/kg
DIMETHYL METHYL HYDROGEN SILICONE FLUID	Inhalation-	Rat	LC50 4.2 mg/l
	Dust/Mist		
	(4 hours)		
DIMETHYL METHYL HYDROGEN SILICONE FLUID	Ingestion	Rat	LD50 > 2,000 mg/kg
CRISTOBALITE	Dermal		LD50 estimated to be > 5,000 mg/kg
CRISTOBALITE	Ingestion		LD50 estimated to be > 5,000 mg/kg
ALUMINUM OXIDE	Dermal		LD50 estimated to be > 5,000 mg/kg
ALUMINUM OXIDE	Inhalation-	Rat	LC50 > 2.3 mg/l
	Dust/Mist		
	(4 hours)		
ALUMINUM OXIDE	Ingestion	Rat	LD50 > 5,000 mg/kg
SODIUM OXIDE	Ingestion		LD50 estimated to be 50 - 300 mg/kg
Oils, mint, Mentha arvensis piperascenssis, var. piperascens,	Dermal	Rabbit	LD50 > 5,000 mg/kg
Labiatae.		1	
Oils, mint, Mentha arvensis piperascenssis, var. piperascens,	Ingestion	Rat	LD50 1,240 mg/kg
Labiatae.		1	

# ATE = acute toxicity estimate

# Skin Corrosion/Irritation

Name	Species	Value
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
VINYL-POLYDIMETHYL SILOXANE	Rabbit	No significant irritation
FLUX CALCINED DIATOMACEOUS EARTH	Rabbit	No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
CRISTOBALITE		No significant irritation
ALUMINUM OXIDE	Rabbit	No significant irritation
Oils, mint, Mentha arvensis piperascenssis, var. piperascens, Labiatae.	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
VINYL-POLYDIMETHYL SILOXANE	Rabbit	Mild irritant
FLUX CALCINED DIATOMACEOUS EARTH	Rabbit	No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
ALUMINUM OXIDE	Rabbit	No significant irritation
Oils, mint, Mentha arvensis piperascenssis, var. piperascens, Labiatae.	In vitro	Severe irritant
	data	

# **Skin Sensitization**

Name	Species	Value
FLUX CALCINED DIATOMACEOUS EARTH	Human	Not sensitizing
	and	
	animal	
SILANE TREATED SILICA	Human	Not sensitizing
	and	
	animal	
Oils, mint, Mentha arvensis piperascenssis, var. piperascens, Labiatae.	Guinea	Sensitizing
	pig	-

**Respiratory Sensitization** 

Name	Species	Value

**Germ Cell Mutagenicity** 

Germ Cen Madagement		
Name	Route	Value
FLUX CALCINED DIATOMACEOUS EARTH	In Vitro	Not mutagenic
SILANE TREATED SILICA	In Vitro	Not mutagenic
CRISTOBALITE	In Vitro	Some positive data exist, but the data are not sufficient for classification
CRISTOBALITE	In vivo	Some positive data exist, but the data are not sufficient for classification
ALUMINUM OXIDE	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
FLUX CALCINED DIATOMACEOUS EARTH	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
SILANE TREATED SILICA	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
CRISTOBALITE	Inhalation	Human	Carcinogenic
		and	
		animal	
ALUMINUM OXIDE	Inhalation	Rat	Not carcinogenic

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
FLUX CALCINED DIATOMACEOUS	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509	1 generation

EARTH				mg/kg/day	
FLUX CALCINED DIATOMACEOUS	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497	1 generation
EARTH				mg/kg/day	
FLUX CALCINED DIATOMACEOUS	Ingestion	Not toxic to development	Rat	NOAEL	during
EARTH				1,350	organogenesi
				mg/kg/day	S
SILANE TREATED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509	1 generation
				mg/kg/day	
SILANE TREATED SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497	1 generation
				mg/kg/day	
SILANE TREATED SILICA	Ingestion	Not toxic to development	Rat	NOAEL	during
				1,350	organogenesi
				mg/kg/day	S

## Target Organ(s)

Specific Target Organ Toxicity - single exposure

- 4	1						
	Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure
							Duration

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
FLUX CALCINED DIATOMACEOUS EARTH	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
SILANE TREATED SILICA	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
CRISTOBALITE	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
ALUMINUM OXIDE	Inhalation	pneumoconiosis   pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

### **Aspiration Hazard**

_	1	
	Name	Value

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 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.

## 311/312 Hazard Categories:

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

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

Ingredient	C.A.S. No	% by Wt
ALUMINUM OXIDE	1344-28-1	< 5
ALUMINUM OXIDE (ALUMINUM OXIDE	1344-28-1	< 5
(FIBROUS FORMS ONLY))		

# 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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 Document Group:
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 05/12/14

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1.00 **Document Group:** 33-0045-6 **Version Number:** 02/17/14 **Initial Issue Issue Date: Supercedes Date:** 

# **SECTION 1: Identification**

### 1.1. Product identifier

3MTM ESPETM IMPRINTTM 4 PRELIMINARY PENTATM Catalyst

### **Product Identification Numbers**

LE-F100-1515-8

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

#### Recommended use

Dental Product, Impression 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 1-888-3M HELPS (1-888-364-3577) **Telephone:** 

## 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.

### 2.3. Hazards not otherwise classified

None.

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

Ingredient	C.A.S. No.	% by Wt
SODIUM ALUMINUM SILICATE	37244-96-5	60 - 70
VINYL-POLYDIMETHYLSILOXANE	68083-19-2	20 - 30
POLY(DIMETHYLSILOXANE)	63148-62-9	1 - 15
DIMETHYL SILOXANE, REACTION PRODUCT	67762-90-7	1 - 10
WITH SILICA		

# **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 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	<b>Condition</b>
Formaldehyde	<b>During Combustion</b>
Carbon monoxide	<b>During Combustion</b>
Carbon dioxide	<b>During Combustion</b>
Irritant Vapors or Gases	During Combustion

## 5.3. Special protective actions for fire-fighters

No unusual fire or explosion hazards are anticipated.

# **SECTION 6: Accidental release measures**

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

Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

## 6.2. Environmental precautions

Avoid release to the environment.

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

Collect as much of the spilled material as possible. Sweep up. Vacuum or sweep up. WARNING! A motor could be an ignition source and cause flammable gases or vapors or dust in the spill area to burn or explode. 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

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

## 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

Ingredient	C.A.S. No.	Agency	Limit type	<b>Additional Comments</b>
SODIUM ALUMINUM	37244-96-5	Chemical	TWA(respirable):5 mg/m3	
SILICATE		Manufacturer		
		Rec Guid		
DIMETHYL SILOXANE,	67762-90-7	Chemical	CEIL:5 mg/m3	
REACTION PRODUCT WITH		Manufacturer	_	
SILICA		Rec Guid		
SILICA, AMORPHOUS	67762-90-7	US Dept of	TWA concentration:0.8	
		Labor - OSHA	mg/m3;TWA:20 millions of	
			particles/cu. ft.	

Amer Conf of Gov. Indust. Hyg.: American Conference of Governmental Industrial Hygienists

American Indust. Hygiene Assoc : American Industrial Hygiene Association

Chemical Manufacturer Rec Guid: Chemical Manufacturer's Recommended Guidelines

US Dept of Labor - 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.

D 4 0 0

### 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

No chemical protective gloves are required. 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

slight characteristic odor; white colored paste Odor, Color, Grade:

**Odor threshold** No Data Available pН No Data Available **Melting point** Not Applicable **Boiling Point** Not Applicable Flash Point No flash point **Evaporation rate** Not Applicable Not Classified Flammability (solid, gas) Flammable Limits(LEL) No Data Available No Data Available Flammable Limits(LEL) Flammable Limits(UEL) No Data Available Flammable Limits(UEL) No Data Available **Vapor Pressure** No Data Available **Vapor Density** No Data Available **Density** 1.5 g/cm3 - 1.7 g/cm3

**Specific Gravity** 1.5 - 1.7 [*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 No Data Available Viscosity **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** 

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 health effects are expected.

#### **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.

#### **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	Ingestion		No data available; calculated ATE 3,721.8 mg/kg

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SODIUM ALUMINUM SILICATE	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
VINYL-POLYDIMETHYLSILOXANE	Dermal	Rabbit	LD50 > 15,440 mg/kg
VINYL-POLYDIMETHYLSILOXANE	Ingestion	Rat	LD50 > 15,440 mg/kg
POLY(DIMETHYLSILOXANE)	Dermal	Rabbit	LD50 > 19,400 mg/kg
POLY(DIMETHYLSILOXANE)	Ingestion	Rat	LD50 > 17,000 mg/kg
DIMETHYL SILOXANE, REACTION PRODUCT WITH	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILICA			
DIMETHYL SILOXANE, REACTION PRODUCT WITH	Inhalation-	Rat	LC50 > 0.691 mg/l
SILICA	Dust/Mist		
	(4 hours)		
DIMETHYL SILOXANE, REACTION PRODUCT WITH	Ingestion	Rat	LD50 > 5,110 mg/kg
SILICA			

ATE = acute toxicity estimate

### **Skin Corrosion/Irritation**

Name	Species	Value
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation

# **Skin Sensitization**

Name	Species	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Human	Not sensitizing
	and	
	animal	

**Respiratory Sensitization** 

Name	Species	Value

**Germ Cell Mutagenicity** 

Name	Route	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	In Vitro	Not mutagenic

Carcinogenicity

- un em egeneral			
Name	Route	Species	Value
DIMETHYL SILOXANE, REACTION PRODUC	T WITH 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
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH 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

# **Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure
						Duration
DIMETHYL SILOXANE,	Inhalation	respiratory system	All data are negative	Human	NOAEL Not	occupational
REACTION PRODUCT		silicosis			available	exposure
WITH SILICA						

#### **Aspiration Hazard**

Name	Value

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 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 <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

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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