# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

071219054

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

070387076 070617324 070617332 070617340 070617357 070617449 070617639 070617647 070617654 070617662 070617670 071219070 071219088 071226430 071226448 075023759 075023767 075023775 075023783 075023791 075023908 075023916 075023924 075023932 075023940 273012944 273016310 273018183 273022135 273023188 273023189



# **Safety Data Sheet**

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# **SECTION 1: Identification**

#### 1.1. Product identifier

3MTM ESPETM FILTEKTM BULK FILL POSTERIOR RESTORATIVE

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

Recommended use

Dental Product, Restorative

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.

#### 2.2. Label elements

Signal word

Warning

#### **Symbols**

Exclamation mark |

## **Pictograms**

Page 1 of 9



### **Hazard Statements**

May cause an allergic skin reaction.

### **Precautionary Statements**

#### **Prevention:**

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.

### **Disposal:**

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

### 2.3. Hazards not otherwise classified

None.

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

Ingredient	C.A.S. No.	% by Wt
SILANE TREATED CERAMIC	444758-98-9	60 - 70 Trade Secret *
AROMATIC URETHANE DIMETHACRYLATE	1431303-59-1	10 - 20 Trade Secret *
YTTERBIUM FLUORIDE (YbF3)	13760-80-0	1 - 10 Trade Secret *
DIURETHANE DIMETHACRYLATE (UDMA)	72869-86-4	1 - 10 Trade Secret *
SILANE TREATED SILICA	248596-91-0	1 - 10 Trade Secret *
1,12-DODECANE DIMETHYCRYLATE (DDDMA)	72829-09-5	< 5 Trade Secret *
SILANE TREATED ZIRCONIA	Unknown	< 5 Trade Secret *
WATER	7732-18-5	< 5 Trade Secret *
MODIFIED METHACRYLATE MONOMER	1429648-13-4	< 1 Trade Secret *
ETHYL 4-DIMETHYL AMINOBENZOATE (EDMAB)	10287-53-3	< 0.5 Trade Secret *
BENZOTRIAZOL	96478-09-0	< 0.5 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:**

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

#### Condition

During Combustion
During Combustion

## 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## **SECTION 6: Accidental release measures**

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

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

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

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

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) 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

Page 3 of 9

## 3MTM ESPETM FILTEKTM BULK FILL POSTERIOR RESTORATIVE 03/22/16

Store away from heat. Store away from oxidizing agents.

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

## 8.1. Control parameters

## Occupational exposure limits

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

Ingredient	C.A.S. No.	Agency	Limit type	<b>Additional Comments</b>
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 dust):2.5	
			mg/m3;TWA(as F):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)

## 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 acrylate odor, tooth colored

**Odor threshold** No Data Available Not Applicable pН **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

Page 4 of 9

Flammable Limits(UEL)

Vapor Pressure

Vapor Density

Not Applicable

Not Applicable

Not Applicable

1.9 g/cm3

Specific Gravity 1.9 [Ref Std: WATER=1]

Solubility in Water Negligible

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

High shear and high temperature conditions

### 10.5. Incompatible materials

Strong oxidizing agents

### 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.

## 11.1. Information on Toxicological effects

Page 5 of 9

### 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.

#### **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.

## **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	Professio	LD50 not applicable
		nal	
		judgeme	
		nt	
Overall product	Ingestion	Rat	LD50 > 2,000 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
YTTERBIUM FLUORIDE (YbF3)	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
YTTERBIUM FLUORIDE (YbF3)	Ingestion	Rat	LD50 > 5,000 mg/kg
DIURETHANE DIMETHACRYLATE (UDMA)	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
DH IDEITHANE DI CETHA CDALATE (UDALA)	*	nt	1050 5000 4
DIURETHANE DIMETHACRYLATE (UDMA)	Ingestion	Rat	LD50 > 5,000 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
1,12-DODECANE DIMETHYCRYLATE (DDDMA)	Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
		nal	
		judgeme	
		nt	
1,12-DODECANE DIMETHYCRYLATE (DDDMA)	Ingestion	similar	LD50 2000-5000 mg/kg
		compoun	
		ds	
ETHYL 4-DIMETHYL AMINOBENZOATE (EDMAB)	Dermal	Rat	LD50 > 2,000 mg/kg
ETHYL 4-DIMETHYL AMINOBENZOATE (EDMAB)	Ingestion	Rat	LD50 > 2,000  mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

OMI COTTOSION/ITTMMON				
Name	Species	Value		
SILANE TREATED CERAMIC	similar	No significant irritation		
	compoun			
	ds			
SILANE TREATED SILICA	Professio	No significant irritation		

	nal	
	judgeme	
	nt	
ETHYL 4-DIMETHYL AMINOBENZOATE (EDMAB)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
SILANE TREATED CERAMIC	similar compoun ds	Mild irritant
YTTERBIUM FLUORIDE (YbF3)	Professio nal judgeme nt	Mild irritant
SILANE TREATED SILICA	Professio nal judgeme nt	No significant irritation
ETHYL 4-DIMETHYL AMINOBENZOATE (EDMAB)	Rabbit	Mild irritant

### **Skin Sensitization**

Name	Species	Value
SILANE TREATED CERAMIC	similar	Some positive data exist, but the data are not
	compoun	sufficient for classification
	ds	
MODIFIED METHACRYLATE MONOMER	similar	Some positive data exist, but the data are not
	compoun	sufficient for classification
	ds	

## **Respiratory Sensitization**

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

## **Germ Cell Mutagenicity**

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

Carcinogenicity

Name	Route	Species	Value
SILANE TREATED CERAMIC	Inhalation	similar	Some positive data exist, but the data are not
		compoun	sufficient for classification
		ds	

## **Reproductive Toxicity**

## Reproductive and/or Developmental Effects

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

## 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

- P						
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
SILANE TREATED CERAMIC	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for	similar compoun	NOAEL Not available	
			classification	ds		

## **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.

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

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient (Category if applicable)</u>	C.A.S. No	<u>Regulation</u>	<u>Status</u>
BENZOTRIAZOL	96478-09-0	Toxic Substances Control Act (TSCA) 5	Applicable
		SNUR or Consent Order Chemicals	

This material contains a chemical regulated by an EPA Significant New Use Rule (TSCA Section 5)

<u>Ingredient (Category if applicable)</u>	C.A.S. No	<b>Reference</b>
BENZOTRIAZOL	96478-09-0	40CFR721.8450

## 15.2. State Regulations

Contact 3M for more information.

Page 8 of 9

### 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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