

# Safety Data Sheet

Copyright, 2020, 3M Company.

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

Document Group:	36-6354-9	Version Number:	1.06
Issue Date:	07/31/20	Supercedes Date:	02/20/20

# **SECTION 1: Identification**

## 1.1. Product identifier

3M<sup>TM</sup> Filtek<sup>TM</sup> One Bulk Fill Restorative

## **Product Identification Numbers**

70-2014-0467-3, 70-2014-0468-1, 70-2014-0469-9, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0470-7, 70-2014-0471-5, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0472-3, 70-2014-0473-1, 70-2014-0472-3, 70-2014-0473-1, 2014-0483-0, 70-2014-0484-8, 70-2014-0485-5, 70-2014-0486-3, 70-2014-0487-1, 70-2014-0488-9, 70-2014-0489-7, 70-2014-0490-5, 70-2014-0491-3, 70-2014-0492-1, 70-2014-0493-9, 70-2014-0494-7, 70-2014-0495-4, 70-2014-0496-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2014-040-2, 70-2004-040-2, 70-2004-040-2, 70-2004-040-2, 70-2004-000-2, 70-2004-000-2, 70-2000-2, 70-2004-000-2, 70-2004-000-2, 70-2004-000-2, 70-2004-000-2, 70-2004-000-2, 70-2004-000-2, 70-20 2014-0497-0, 70-2014-0498-8, 70-2014-0499-6, 70-2014-0500-1, 70-2014-0501-9, 70-2014-0502-7, 70-2014-0506-8, 70-2014-1148-8, 70-2014-1149-6, 70-2014-1150-4, 70-2014-1151-2, 70-2014-1152-0, 70-2014-1153-8, 70-2014-1154-6, 70-2014-1663-6, 70-2014-1664-4, 70-2014-1665-1, 70-2014-1666-9, 70-2014-1667-7, 70-2014-1668-5, 70-2014-1669-3, 70-2014-1670-1, 70-2014-1671-9, 70-2014-1672-7, 70-2014-1673-5, 70-2014-1674-3, 70-2014-1677-6, 70-2014-1678-4, 70-2014-1686-7, 70-2014-1687-5, 70-2014-1688-3, 70-2014-1691-7 7100109998, 7100109985, 7100109997, 7100109992, 7100110000, 7100109994, 7100109993, 7100109986, 7100109991, 7100110007, 7100109989, 7100109999, 7010343366, 7010389463, 7010304361, 7010389464, 7010343367, 7010389465, 7010317631, 7010389466, 7010343368, 7010296868, 7010317633, 7010389472, 7010389467, 7010343369, 7010389468, 7010317632, 7010389469, 7010343370, 7010304362, 7010389470, 7010343371, 7010389471, 7010343373, 7010317634, 7100135777, 7100141095, 7100141100, 7100141479, 7100141087, 7100141085, 7100141084, 7100141121, 7100141092, 7100141091, 7100141127, 7100141124, 7100141093

## 1.2. Recommended use and restrictions on use

### **Recommended use**

Dental Restorative, Restrictions on Use: For use only by dental professionals in approved indications, Dental Restorative

#### 1.3. Supplier's details MANUFACTURE

3M
Oral Care Solutions Division
3M Center, St. Paul, MN 55144-1000, USA
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 1B.

2.2. Label elements Signal word Warning

Symbols Exclamation mark |

### Pictograms



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.

# **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 *
1,12-Dodecane Dimethycrylate (DDDMA)	72829-09-5	< 10 Trade Secret *
Diurethane Dimethacrylate (UDMA)	72869-86-4	1 - 10 Trade Secret *
Silane Treated Silica	248596-91-0	1 - 10 Trade Secret *
Ytterbium Fluoride (YbF3)	13760-80-0	1 - 10 Trade Secret *
Silane Treated Zirconia	None	< 5 Trade Secret *
Water	7732-18-5	< 5 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

### **Skin Contact:**

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

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

<u>Condition</u> 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 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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes.

# 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from oxidizing agents.

# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

## **Occupational exposure limits**

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

## 8.2. Exposure controls

# 8.2.1. Engineering controls

Use in a well-ventilated area.

# 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety Glasses with side shields

## Skin/hand protection

See Section 7.1 for additional information on skin protection.

# **Respiratory protection**

None required.

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

## 9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Solid
Color	Multicolor
Specific Physical Form:	Paste
Odor	Slight Acrylate
Odor threshold	No Data Available
рН	Not Applicable
Melting point	No Data Available
Boiling Point	Not Applicable
Flash Point	No flash point
Evaporation rate	No Data Available
Flammability (solid, gas)	Not Classified

Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Density	1.9 g/cm3
Specific Gravity	1.9 [ <i>Ref Std</i> :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	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** Strong oxidizing agents

Strong oxicizing agents

# 10.6. Hazardous decomposition products

<u>Substance</u>

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

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

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:

# Condition

## 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 nal judgeme	LD50 Not applicable
		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
Silane Treated Zirconia	Dermal		LD50 estimated to be > 5,000 mg/kg
Silane Treated Zirconia	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Diurethane Dimethacrylate (UDMA)	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Diurethane Dimethacrylate (UDMA)	Ingestion	Rat	LD50 > 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
1,12-Dodecane Dimethycrylate (DDDMA)	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
1,12-Dodecane Dimethycrylate (DDDMA)	Ingestion	similar compoun ds	LD50 2000-5000 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

ATE = acute toxicity estimate

### **Skin Corrosion/Irritation**

Name	Species	Value
Silane Treated Ceramic	similar	No significant irritation
	compoun	
	ds	
Silane Treated Zirconia	Rabbit	No significant irritation
Silane Treated Silica	Professio	No significant irritation
	nal	
	judgeme	

### **3M<sup>TM</sup>** Filtek<sup>TM</sup> One Bulk Fill Restorative 07/31/20

nt		
int	nt	

### Serious Eye Damage/Irritation

Name	Species	Value
Silane Treated Ceramic	similar	Mild irritant
	compoun	
	ds	
Silane Treated Zirconia	Rabbit	Mild irritant
Ytterbium Fluoride (YbF3)	Professio	Mild irritant
	nal	
	judgeme	
	nt	
Silane Treated Silica	Professio	No significant irritation
	nal	
	judgeme	
	nt	

# Skin Sensitization

Name	Species	Value
Silane Treated Ceramic	similar	Not classified
	compoun	
	ds	
Diurethane Dimethacrylate (UDMA)	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
Silane Treated Zirconia	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
Silane Treated Zirconia	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

# **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

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Silane Treated Ceramic	Inhalation	pulmonary fibrosis	Not classified	similar compoun ds	NOAEL Not available	
Silane Treated Zirconia	Inhalation	pulmonary fibrosis	Not classified	Multiple	NOAEL Not	

### **3M<sup>TM</sup>** Filtek<sup>TM</sup> One Bulk Fill Restorative 07/31/20

				animal species	available	
Silane Treated Zirconia	Inhalation	respiratory system	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. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

# EPA Hazardous Waste Number (RCRA): Not regulated

# **SECTION 14: Transport Information**

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

# **SECTION 15: Regulatory information**

# **15.1. US Federal Regulations**

Contact 3M for more information.

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

Physical Hazards Not applicable

# Health Hazards

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.

Document Group:	36-6354-9	Version Number:	1.06
Issue Date:	07/31/20	Supercedes Date:	02/20/20

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

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

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