Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier
3M™ Filtek™ 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, 70-2014-0474-9, 70-2014-0475-6, 70-2014-0476-4, 70-2014-0477-2, 70-2014-0478-0, 70-2014-0481-4, 70-2014-0482-2, 70-2014-0483-0, 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, 70-2014-0497-0, 70-2014-0498-8, 70-2014-0499-6, 70-2014-0500-1, 70-2014-0501-9, 70-2014-0502-7, 70-2014-0506-8, 70-2014-0508-4, 70-2014-0639-7, 70-2014-1143-9, 70-2014-1144-7, 70-2014-1145-4, 70-2014-1146-2, 70-2014-1147-0, 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, 70-2014-1679-2, 70-2014-1680-0, 70-2014-1681-8, 70-2014-1682-6, 70-2014-1683-4, 70-2014-1684-2, 70-2014-1685-9, 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

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 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

Substance	Condition
Carbon monoxide	During Combustion
Carbon dioxide	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*
pH	*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 [*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	*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

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:
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	Professional judgement	LD50 Not applicable
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	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Diurethane Dimethacrylate (UDMA)	Ingestion	Rat	LD50 > 5,000 mg/kg
Ytterbium Fluoride (YbF3)	Dermal	Professional judgement	LD50 estimated to be > 5,000 mg/kg
Ytterbium Fluoride (YbF3)	Ingestion	Rat	LD50 > 5,000 mg/kg
1,12-Dodecane Dimethycrylate (DDDMA)	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
1,12-Dodecane Dimethycrylate (DDDMA)	Ingestion	similar compounds	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 compounds	No significant irritation
Silane Treated Zirconia	Rabbit	No significant irritation
Silane Treated Silica	Professional judgeme	No significant irritation

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Serious Eye Damage/Irritation

Name	Species	Value
Silane Treated Ceramic	similar compounds	Mild irritant
Silane Treated Zirconia	Rabbit	Mild irritant
Ytterbium Fluoride (YbF3)	Professional judgement	Mild irritant
Silane Treated Silica	Professional judgement	No significant irritation

Skin Sensitization

Name	Species	Value
Silane Treated Ceramic	similar compounds	Not classified
Diurethane Dimethacrylate (UDMA)	Guinea pig	Sensitizing

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 compounds	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 compounds	NOAEL Not available	
Silane Treated Zirconia	Inhalation	pulmonary fibrosis	Not classified	Multiple	NOAEL Not	

				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.

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