## **SAFETY DATA SHEETS**

# This SDS packet was issued with item: 075024724

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075024427 075024435 075024443 075024450 075024468 075024476 075024484 075024492 075024500 075024518 075024526 075024534 075024542 075024609 075024617 075024625 075024633 075024641 075024658 075024666 075024674 075024682 075024690 075024708 075024716



## **Material Safety Data Sheet**

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## **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:**PARADIGM™ NANO HYBRID UNIVERSAL RESTORATIVE**MANUFACTURER:**3M**DIVISION:**3M ESPE Dental Products

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

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

 Issue Date:
 09/04/12

 Supercedes Date:
 03/16/11

Document Group: 29-1348-1

#### **Product Use:**

Intended Use:Dental ProductLimitations on Use:For use only by dental professionalsSpecific Use:Dental Restorative

## **SECTION 2: INGREDIENTS**

Ingredient	C.A.S. No.	<u>% by Wt</u>
SILANE TREATED CERAMIC	444758-98-9	65 - 90
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	1565-94-2	1 - 10
DIURETHANE DIMETHACRYLATE (UDMA)	72869-86-4	1 - 10
SILANE TREATED SILICA	248596-91-0	1 - 10
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	41637-38-1	1 - 10

## **SECTION 3: HAZARDS IDENTIFICATION**

## **3.1 EMERGENCY OVERVIEW**

#### Specific Physical Form: Paste

Odor, Color, Grade: Slight acrylate odor, tooth-colored various shades

General Physical Form: Solid

**Immediate health, physical, and environmental hazards:** May cause allergic skin reaction. 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

#### MATERIAL SAFETY DATA SHEET PARADIGM<sup>TM</sup> NANO HYBRID UNIVERSAL RESTORATIVE 09/04/12

depending on the potential for exposure.

## 3.2 POTENTIAL HEALTH EFFECTS

#### **Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### **Skin Contact:**

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

#### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### Ingestion:

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

## **SECTION 4: FIRST AID MEASURES**

## 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## **SECTION 5: FIRE FIGHTING MEASURES**

## 5.1 FLAMMABLE PROPERTIES

Autoignition temperature Flash Point Flammable Limits(LEL) Flammable Limits(UEL) No Data Available No flash point Not Applicable Not Applicable

#### 5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

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## Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. 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. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

#### **6.2.** Environmental precautions

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

#### **Clean-up methods**

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Clean up residue.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. A notouch 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. Avoid eye contact with dust or airborne particles. Avoid skin contact. Wash hands after handling and before eating.

#### 7.2 STORAGE

Store out of direct sunlight. Store away from areas where product may come into contact with food or pharmaceuticals. Store in a cool, dry place.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1 ENGINEERING CONTROLS**

Use in an enclosed process area is recommended. Use in a well-ventilated area. Do not use in a confined area or areas with little or no air movement.

## 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact. The following eye protection(s) are recommended: Safety Glasses with side shields .

#### 8.2.2 Skin Protection

Avoid skin contact.

See Section 7.1 for more information on skin protection.

#### 8.2.3 Respiratory Protection

Not applicable.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable. Do not ingest. Wash hands after handling and before eating.

#### 8.3 EXPOSURE GUIDELINES

None Established

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Specific Physical Form: Odor, Color, Grade: General Physical Form: Autoignition temperature Flash Point Flammable Limits(LEL) Flammable Limits(UEL) Boiling Point Density Vapor Density

**Vapor Pressure** 

Specific Gravity pH Melting point

Solubility in Water Evaporation rate Kow - Oct/Water partition coef Viscosity Paste Slight acrylate odor, tooth-colored various shades Solid *No Data Available* No flash point *Not Applicable Not Applicable* 2.1 g/cm3 *Not Applicable* 

Not Applicable

2.1 [*Ref Std:* WATER=1] *Not Applicable No Data Available* 

Negligible Not Applicable Not Applicable No Data Available

## **SECTION 10: STABILITY AND REACTIVITY**

#### Stability: Stable.

Materials and Conditions to Avoid: 10.1 Conditions to avoid Light

**10.2 Materials to avoid** None known

Hazardous Polymerization: Hazardous polymerization will not occur.

#### Hazardous Decomposition or By-Products

**Substance** 

**Condition** 

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Carbon monoxide Carbon dioxide During Combustion During Combustion

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## **SECTION 12: ECOLOGICAL INFORMATION**

## ECOTOXICOLOGICAL INFORMATION

Not determined.

## CHEMICAL FATE INFORMATION

Not determined.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** For quantities <100 lbs. (50kg): dispose of waste product in a sanitary landfill. For larger quantities: incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

#### EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

## **SECTION 14:TRANSPORT INFORMATION**

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

70-2010-7953-3, 70-2010-7954-1, 70-2010-7955-8, 70-2010-7956-6, 70-2010-7957-4, 70-2010-7958-2, 70-2010-7959-0, 70-2010-7960-8, 70-2010-7961-6, 70-2010-7962-4, 70-2010-7963-2, 70-2010-7964-0, 70-2010-7965-7, 70-2010-7966-5, 70-2010-7967-3, 70-2010-7968-1, 70-2010-7969-9, 70-2010-7970-7, 70-2010-7971-5, 70-2010-7972-3, 70-2010-7973-1, 70-2010-7974-9, 70-2010-7975-6, 70-2010-7976-4, 70-2010-7977-2, 70-2010-8548-0

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

## **SECTION 15: REGULATORY INFORMATION**

## **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

## **STATE REGULATIONS**

Contact 3M for more information.

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#### **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.

## **INTERNATIONAL REGULATIONS**

Contact 3M for more information.

This MSDS 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 Reactivity: 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.

**Revision Changes:** 

Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 3: Potential effects from skin contact information was modified.

Section 7: Handling information was modified.

Section 7: Storage information was modified.

Section 8: Engineering controls information was modified.

Section 8: Prevention of swallowing information was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Section 9: Density information was modified.

Section 9: Vapor density value was modified.

Section 9: Vapor pressure value was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 5: Autoignition temperature information was modified.

Section 5: Flash point information was modified.

Section 9: Property description for optional properties was modified.

Section 9: Specific gravity information was modified.

Section 9: pH information was modified.

Section 9: Melting point information was modified.

Section 9: Solubility in water text was modified.

Section 9: Flash point information was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 9: Autoignition temperature information was modified.

Section 2: Ingredient table was modified.

Section 6: Methods for cleaning up information was modified.

Section 16: Web address was added.

Section 1: Address was added.

Copyright was added.

Company logo was added.

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Telephone header was added. Company Telephone was added. Section 1: Emergency phone information was added. Section 1: Emergency phone information was deleted. Company Logo was deleted. Copyright was deleted. Section 16: Web address heading was deleted. Section 1: Address line 1 was deleted. Section 1: Address line 2 was deleted.

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Document Group:	29-1348-1	Version Number:	4.01
Issue Date:	12/28/17	Supercedes Date:	02/25/16

## **SECTION 1: Identification**

#### 1.1. Product identifier

PARADIGM<sup>TM</sup> NANO HYBRID UNIVERSAL RESTORATIVE

#### **Product Identification Numbers**

LE-F100-0922-4, LE-F100-0922-5, 70-2010-7953-3, 70-2010-7954-1, 70-2010-7955-8, 70-2010-7956-6, 70-2010-7957-4, 70-2010-7958-2, 70-2010-7959-0, 70-2010-7960-8, 70-2010-7961-6, 70-2010-7962-4, 70-2010-7963-2, 70-2010-7964-0, 70-2010-7965-7, 70-2010-7966-5, 70-2010-7967-3, 70-2010-7968-1, 70-2010-7969-9, 70-2010-7970-7, 70-2010-7971-5, 70-2010-7972-3, 70-2010-7973-1, 70-2010-7974-9, 70-2010-7975-6, 70-2010-7976-4, 70-2010-7977-2, 70-2010-8548-0, 70-2010-9819-4, 70-2010-9820-2, 70-2010-9821-0, 70-2010-9822-8, 70-2010-9823-6, 70-2010-9824-4, 70-2010-9825-1, 70-2010-9826-9, 70-2010-9827-7, 70-2010-9828-5, 70-2010-9829-3, 70-2010-9830-1, 70-2010-9831-9, 70-2010-9832-7, 70-2010-9833-5, 70-2010-9834-3, 70-2010-9835-0, 70-2010-9836-8, 70-2010-9837-6, 70-2010-9838-4, 70-2010-9839-2, 70-2010-9840-0, 70-2010-9841-8, 70-2010-9842-6, 70-2010-9843-4

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

Recommended use Dental Product, Restorative Restrictions on use For use only by dental professionals

3M	
Oral Care Solutions Division	
3M Center, St. Paul, MN 55144-100	00, USA
1-888-3M HELPS (1-888-364-3577)	
	Oral Care Solutions Division 3M Center, St. Paul, MN 55144-100

**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.

12/28/17

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

Ingredient	C.A.S. No.	% by Wt
SILANE TREATED CERAMIC	444758-98-9	65 - 90 Trade Secret *
BISPHENOL A DIGLYCIDYL ETHER	1565-94-2	1 - 10 Trade Secret *
DIMETHACRYLATE (BISGMA)		
BISPHENOL A POLYETHYLENE GLYCOL	41637-38-1	1 - 10 Trade Secret *
DIETHER DIMETHACRYLATE		
DIURETHANE DIMETHACRYLATE (UDMA)	72869-86-4	1 - 10 Trade Secret *
SILANE TREATED SILICA	248596-91-0	1 - 10 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

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.

#### **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 get in eyes, on skin, or on clothing. 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.

#### 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**

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

General Physical Form:	Solid	
Specific Physical Form:	Paste	
Odor, Color, Grade:	Slight acrylate odor, tooth-colored various shades	
Odor threshold	No Data Available	
рН	Not Applicable	
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	
Density	2.1 g/cm3	
Specific Gravity	2.1 [ <i>Ref Std</i> :WATER=1]	
Solubility in Water	Negligible	
Solubility- non-water	No Data Available	

Partition coefficient: n-octanol/ water Autoignition temperature Decomposition temperature Viscosity Molecular weight Not Applicable No Data Available No Data Available No Data Available 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** Light

**10.5. Incompatible materials** None known.

**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. 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.

Condition

#### **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:**

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 ATE2,000 - 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
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
DIURETHANE DIMETHACRYLATE (UDMA)	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	Ingestion	Rat	LD50 > 2,000 mg/kg
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
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 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 SILICA	Professio	No significant irritation
	nal	
	judgeme	
	nt	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Not	Minimal irritation
	available	

#### **Serious Eye Damage/Irritation**

Name	Species	Value
SILANE TREATED CERAMIC	similar	Mild irritant
	compoun	
	ds	
SILANE TREATED SILICA	Professio	No significant irritation

	nal judgeme nt	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Not available	Moderate irritant

#### **Skin Sensitization**

Name	Species	Value
SILANE TREATED CERAMIC	similar	Not classified
	compoun	
	ds	
BISPHENOL A POLYETHYLENE GLYCOL DIETHER	Guinea	Not classified
DIMETHACRYLATE	pig	
DIURETHANE DIMETHACRYLATE (UDMA)	Guinea	Sensitizing
	pig	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	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
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	In Vitro	Not mutagenic
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	In Vitro	Some positive data exist, but 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**

Name	Route	Value	Species	Test Result	Exposure Duration
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Not classified for female reproduction	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Not classified for male reproduction	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Not classified for development	Mouse	NOAEL 0.8 mg/kg/day	premating & during 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
SILANE TREATED CERAMIC	Inhalation	pulmonary fibrosis	Not classified	similar compoun ds	NOAEL Not available	
BISPHENOL A	Ingestion	endocrine system	Not classified	Mouse	NOAEL 0.8	premating &

DIGLYCIDYL ETHER	liver   nervous	mg/kg/day	during
DIMETHACRYLATE	system   kidney		gestation
(BISGMA)	and/or bladder		

#### 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.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal 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

Respiratory or Skin Sensitization

#### Additional TSCA Information

Components	CAS No	Consent Order/SNUR
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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