# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

075036561

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

075036553 075036603 075036629 075036637 273014411

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).

075036611



# **Material Safety Data Sheet**

Copyright, 2011, 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.

**PRODUCT NAME:** 3M<sup>TM</sup> ESPE<sup>TM</sup> RelyX<sup>TM</sup> Unicem 2 Clicker<sup>TM</sup> Refill

**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:** 03/02/11 **Supercedes Date:** 02/23/11

**Document Group:** 29-2964-4

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

70-2011-3721-6, 70-2011-3722-4, 70-2011-3723-2

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

29-2268-0, 29-2266-4

**Revision Changes:** 

Page Heading: Product name was modified.

Kit: Product name was modified. Kit initial issue message was modified. Kit: ID Number(s) was modified.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) 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.

MATERIAL SAFETY DATA SHEET 3M <sup>TM</sup> ESPE <sup>TM</sup> RelyX <sup>TM</sup> Unicem 2 Clicker <sup>TM</sup> Refill 03/02/11
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 MSDS available directly from 3M



# **Material Safety Data Sheet**

Copyright, 2012, 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.

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

**PRODUCT NAME:** 3M<sup>TM</sup> ESPE<sup>TM</sup> RelyX<sup>TM</sup> UNICEM 2 CLICKER<sup>TM</sup> Base Paste

**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:** 03/15/12 **Supercedes Date:** 02/02/11

**Document Group:** 29-2266-4

**Product Use:** 

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals.

Specific Use: Dental cement

# **SECTION 2: INGREDIENTS**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
SILANE TREATED GLASS POWDER	None	45 - 55
2-PROPENOIC ACID, 2-METHYL-, 1,1'-[1-(HYDROXYMETHYL)-1,2-	1224866-76-5	20 - 30
ETHANEDIYL] ESTER, REACTION PRODUCTS WITH 2-HYDROXY-1,3-		
PROPANEDIYL DIMETHACRYLATE AND PHOSPHORUS OXIDE		
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	109-16-0	10 - 20
SILANE TREATED SILICA	68909-20-6	1 - 10
SODIUM PERSULFATE	7775-27-1	< 3
GLASS POWDER	65997-17-3	< 3
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	13122-18-4	< 0.5

# **SECTION 3: HAZARDS IDENTIFICATION**

# 3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: toothcolored paste with slight acrylic odor

Page 1 of 7

General Physical Form: Solid

Immediate health, physical, and environmental hazards: May cause allergic skin reaction. May cause allergic respiratory 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 depending on the potential for exposure.

#### 3.2 POTENTIAL HEALTH EFFECTS

#### **Eve Contact:**

Contact with the eyes during product use is not expected to result in significant irritation.

#### **Skin Contact:**

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

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

#### Inhalation:

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

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 temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data Available

# 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

Page 2 of 7

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

**Unusual Fire and Explosion Hazards:** Not applicable.

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.

#### 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. Avoid skin contact. Wash hands after handling and before eating. 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. Avoid eye contact with dust or airborne particles.

## 7.2 STORAGE

Store away from heat. Store out of direct sunlight. Store away from areas where product may come into contact with food or pharmaceuticals.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 ENGINEERING CONTROLS

Use in an enclosed process area is recommended. 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

Page 3 of 7

Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

#### 8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

#### 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

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	Additional Information
GLASS POWDER	Manufacturer	TWA, as dust	10 mg/m3	
	determined			
PERSULFATE COMPOUNDS	ACGIH	TWA as persulfate	$0.1 \text{ mg/m}^3$	

#### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

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

Specific Physical Form: Paste

Odor, Color, Grade: toothcolored paste with slight acrylic odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableBoiling PointNo Data AvailableDensity2 - 2.2 g/cm3Vapor DensityNo Data Available

Vapor Pressure No Data Available

**Specific Gravity** 2 - 2.2 [*Ref Std:* WATER=1]

pH Not Applicable
Melting point No Data Available

Solubility in Water Negligible

Evaporation rateNo Data AvailableKow - Oct/Water partition coefNo Data AvailableViscosityNo Data Available

# **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

# **Hazardous Decomposition or By-Products**

Substance

Carbon monoxide Carbon dioxide Irritant Vapors or Gases

# **Condition**

During Combustion 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.

EPA Hazardous Waste Number (RCRA): Not regulated

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

# **SECTION 14:TRANSPORT INFORMATION**

LE-F100-0912-3

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

# **SECTION 15: REGULATORY INFORMATION**

Page 5 of 7

#### 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.

## **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: 0 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 3: Potential effects from inhalation 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.

Page 6 of 7

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 8: Exposure guidelines ingredient information 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.

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 1: Address line 1 was deleted.

Section 1: Address line 2 was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) 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 MSDS available directly from 3M

3M USA MSDSs are available at www.3M.com

Page 7 of 7



# **Material Safety Data Sheet**

Copyright, 2011, 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.

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

**PRODUCT NAME:** 3M<sup>TM</sup> ESPE<sup>TM</sup> RelyX<sup>TM</sup> UNICEM 2 CLICKER<sup>TM</sup> CATALYST

**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:** 05/16/11 **Supercedes Date:** 02/01/11

**Document Group:** 29-2268-0

**Product Use:** 

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Dental cement

Use – Nordic only: 2-osainen sementti. Katalysaattoripasta.

# **SECTION 2: INGREDIENTS**

<u>Ingredient</u>	<u>C.A.S. No.</u>	% by Wt
SILANE TREATED GLASS POWDER	None	55 - 65
SUBSTITUTED DIMETHACRYLATE	27689-12-9	20 - 30
SILANE TREATED SILICA	68909-20-6	< 5
SODIUM P-TOLUENESULFINATE	824-79-3	< 5
1-BENZYL-5-PHENYL-BARBIC-ACID, CALCIUM SALT	None	< 5
1,12-DODECANE DIMETHYCRYLATE	72829-09-5	< 5
CALCIUM HYDROXIDE	1305-62-0	< 2

# **SECTION 3: HAZARDS IDENTIFICATION**

### 3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: tooth-colored pastes with slight acrylic odor

General Physical Form: Solid

Page 1 of 7

**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 depending on the potential for exposure.

## 3.2 POTENTIAL HEALTH EFFECTS

#### **Eve Contact:**

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

#### **Skin Contact:**

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

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, 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 temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data Available

## 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).

Page 2 of 7

**Unusual Fire and Explosion Hazards:** Non-flammable: ordinary combustible material.

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.

#### 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. Avoid skin contact. Wash hands after handling and before eating. 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. Avoid eye contact with dust or airborne particles.

## 7.2 STORAGE

Store away from heat. Store out of direct sunlight.

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

## 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation.

# **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. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

# 8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

## 8.2.4 Prevention of Swallowing

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

## 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<b>Authority</b>	<b>Type</b>	<u>Limit</u>	<b>Additional Information</b>
CALCIUM HYDROXIDE	ACGIH	TWA	5 mg/m3	
CALCIUM HYDROXIDE	OSHA	TWA, respirable	5 mg/m3	
		fraction		
CALCIUM HYDROXIDE	OSHA	TWA, as total dust	15 mg/m3	
Limestone	OSHA	TWA, respirable	5 mg/m3	
		fraction		
Limestone	OSHA	TWA, as total dust	15 mg/m3	

## SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

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

Specific Physical Form: Paste

Odor, Color, Grade: tooth-colored pastes with slight acrylic odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableBoiling PointNo Data AvailableDensity2 - 2.2 g/cm3Vapor DensityNo Data Available

Vapor Pressure No Data Available

**Specific Gravity** 2 - 2.2 [*Ref Std:* WATER=1]

pH Not ApplicableMelting point No Data Available

Solubility in Water Nil

Evaporation rateNo Data AvailableKow - Oct/Water partition coefNo Data AvailableViscosityNo Data Available

# **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

**Materials and Conditions to Avoid:** 

#### 10.1 Conditions to avoid

Heat

#### 10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

# **Hazardous Decomposition or By-Products**

Substance
Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

Condition
During Combustion
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: 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**

LE-F100-0912-5

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.

## **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: 0 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 name was modified.

Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 5: Unusual fire and explosion hazard information was modified.

Section 7: Handling information was modified.

Section 8: Engineering controls information was modified.

Section 8: Prevention of swallowing information was modified.

Section 13: Waste disposal method information was modified.

Page Heading: Product name was modified.

Section 1: Initial issue message 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.

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.

Page 6 of 7

Section 1: Address line 2 was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) 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 MSDS available directly from 3M

3M USA MSDSs are available at www.3M.com

Page 7 of 7



# Safety Data Sheet

Copyright, 2015, 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:
 29-2964-4
 Version Number:
 1.02

 Issue Date:
 04/15/15
 Supercedes Date:
 03/02/11

**Product identifier** 

3M<sup>TM</sup> ESPE<sup>TM</sup> RelyX<sup>TM</sup> Unicem 2 Clicker<sup>TM</sup> Refill

**ID** Number(s):

70-2011-3721-6, 70-2011-3722-4, 70-2011-3723-2

Recommended use

Dental Product, Dental cement

Restrictions on use

For use only by dental professionals

Supplier's details

**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 telephone number** 

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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

29-2266-4, 29-2268-0

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.

3M <sup>TM</sup> ESPE <sup>TM</sup> RelyX <sup>TM</sup> Unicem 2 Clicker <sup>TM</sup> Refill 04/15/15
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



# **Safety Data Sheet**

Copyright, 2015, 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:
 29-2268-0
 Version Number:
 4.00

 Issue Date:
 08/31/15
 Supercedes Date:
 06/01/15

# **SECTION 1: Identification**

#### 1.1. Product identifier

3MTM ESPETM RelyXTM UNICEM 2 CLICKERTM CATALYST

#### **Product Identification Numbers**

LE-F100-0912-5

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

#### Recommended use

Dental Product, Cement

#### **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 **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

Serious Eye Damage/Irritation: Category 2A.

Skin Sensitizer: Category 1.

#### 2.2. Label elements

Signal word

Warning

**Symbols** 

Page 1 of 11

# Exclamation mark |

#### **Pictograms**



#### **Hazard Statements**

Causes serious eye irritation.

May cause an allergic skin reaction.

## **Precautionary Statements**

#### **Prevention:**

Wear eye/face protection.

Wear protective gloves.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

### **Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention. 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
Glass powder (65997-17-3), surface modified with 2-	None	50 - 70 Trade Secret *
propenoic acid, 2 methyl3-(trimethoxysilyl)propyl ester		
(2530-85-0), bulk material		
SUBSTITUTED DIMETHACRYLATE	27689-12-9	10 - 30 Trade Secret *
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-phenyl-1-	945012-02-2	< 5 Trade Secret *
(phenylmethyl)-, calcium salt (2:1)		
1,12-DODECANE DIMETHYCRYLATE	72829-09-5	< 5 Trade Secret *
SILANE TREATED SILICA	68909-20-6	< 5 Trade Secret *
SODIUM P-TOLUENESULFINATE	824-79-3	< 5 Trade Secret *
2-Propenoic acid, 2-methyl-, [(3-	93962-71-1	< 2 Trade Secret *
methoxypropyl)imino]di-2,1-ethanediyl ester		
CALCIUM HYDROXIDE	1305-62-0	< 2 Trade Secret *
Methacrylated Amine	93962-70-0	< 0.5 Trade Secret *
NUC - Titanium Dioxide	13463-67-7	< 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.

#### **Eve Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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

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

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

Store away from heat.

# **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>
CALCIUM HYDROXIDE	1305-62-0	ACGIH	TWA:5 mg/m3	
CALCIUM HYDROXIDE	1305-62-0	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3	
NUC - Titanium Dioxide	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human
				carcin
NUC - Titanium Dioxide	13463-67-7	CMRG	TWA(as respirable dust):5	
			mg/m3	
NUC - Titanium Dioxide	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
SILICA, AMORPHOUS	68909-20-6	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:**Solid **Specific Physical Form:**Paste

Odor, Color, Grade: tooth-colored pastes with slight acrylic odor

**Odor threshold** No Data Available Not Applicable pН **Melting point** No Data Available **Boiling Point** No Data Available **Flash Point** No flash point **Evaporation rate** No Data Available Not Classified Flammability (solid, gas) Flammable Limits(LEL) No Data Available Flammable Limits(UEL) No Data Available **Vapor Pressure** No Data Available **Vapor Density** No Data Available **Density** 2 - 2.2 g/cm3

**Specific Gravity** 2 - 2.2 [*Ref Std:* WATER=1]

Solubility in Water Nil

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data AvailableViscosityNo Data AvailablePercent volatileNo 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

## 10.5. Incompatible materials

None known.

## 10.6. Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

Page 5 of 11

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

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.

#### Skin Contact:

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

#### **Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

#### **Ingestion:**

May be harmful if swallowed.

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

# **Additional Health Effects:**

#### **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	CAS No.	Class Description	Regulation
NUC - Titanium Dioxide	13463-67-7	Grp. 2B: Possible human carc.	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	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000

			mg/kg
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
SUBSTITUTED DIMETHACRYLATE	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
SUBSTITUTED DIMETHACRYLATE	Ingestion	Rat	LD50 > 17,600 mg/kg
1,12-DODECANE DIMETHYCRYLATE	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
1,12-DODECANE DIMETHYCRYLATE	Ingestion	similar compoun ds	LD50 2000-5000 mg/kg
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-phenyl-1-(phenylmethyl)-, calcium salt (2:1)	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-phenyl-1-(phenylmethyl)-, calcium salt (2:1)	Ingestion	Rat	LD50 > 2,000 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
SILANE TREATED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
SODIUM P-TOLUENESULFINATE	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
SODIUM P-TOLUENESULFINATE	Ingestion	Rat	LD50 3,200 mg/kg
CALCIUM HYDROXIDE	Dermal	Rabbit	LD50 > 2,500 mg/kg
CALCIUM HYDROXIDE	Ingestion	Rat	LD50 7,340 mg/kg
2-Propenoic acid, 2-methyl-, [(3-methoxypropyl)imino]di-2,1-ethanediyl ester	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
2-Propenoic acid, 2-methyl-, [(3-methoxypropyl)imino]di-2,1-ethanediyl ester	Ingestion	Rat	LD50 > 1,600 mg/kg
NUC - Titanium Dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
NUC - Titanium Dioxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
NUC - Titanium Dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Methacrylated Amine	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Methacrylated Amine	Ingestion	Rat	LD50 > 400 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl3-(trimethoxysilyl)propyl ester (2530-85-0), bulk material	Professio nal judgeme nt	No significant irritation
SUBSTITUTED DIMETHACRYLATE	Rabbit	No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
CALCIUM HYDROXIDE	Human	Corrosive
NUC - Titanium Dioxide	Rabbit	No significant irritation

**Serious Eye Damage/Irritation** 

Name	Species	Value
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl3-	Professio	No significant irritation
(trimethoxysilyl)propyl ester (2530-85-0), bulk material	nal judgeme nt	
SUBSTITUTED DIMETHACRYLATE	Rabbit	Mild irritant
SILANE TREATED SILICA	Rabbit	No significant irritation
CALCIUM HYDROXIDE	Rabbit	Corrosive
NUC - Titanium Dioxide	Rabbit	No significant irritation

# **Skin Sensitization**

Name	Species	Value
SUBSTITUTED DIMETHACRYLATE	Guinea	Not sensitizing
	pig	
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-phenyl-1-(phenylmethyl)-, calcium salt	Mouse	Not sensitizing
(2:1)		
SILANE TREATED SILICA	Human	Not sensitizing
	and	
	animal	
2-Propenoic acid, 2-methyl-, [(3-methoxypropyl)imino]di-2,1-ethanediyl ester	Professio	Sensitizing
	nal	
	judgeme	
	nt	
NUC - Titanium Dioxide	Human	Not sensitizing
	and	
	animal	
Methacrylated Amine	Professio	Sensitizing
	nal	
	judgeme	
	nt	

# **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
SUBSTITUTED DIMETHACRYLATE	In Vitro	Not mutagenic
2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-phenyl-1-(phenylmethyl)-, calcium salt	In Vitro	Not mutagenic
(2:1)		
SILANE TREATED SILICA	In Vitro	Not mutagenic
NUC - Titanium Dioxide	In Vitro	Not mutagenic
NUC - Titanium Dioxide	In vivo	Not mutagenic

Carcinogenicity

curemogenery			
Name	Route	Species	Value
SILANE TREATED SILICA	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
NUC - Titanium Dioxide	Ingestion	Multiple	Not carcinogenic
		animal	
		species	
NUC - Titanium Dioxide	Inhalation	Rat	Carcinogenic

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Reproductive and/or Developmental Effects						
Name	Route	Value	Species	Test Result	Exposure Duration	
SILANE TREATED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation	

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 1,350 mg/kg/day	during organogenesi
					s

#### Target Organ(s)

Specific Target Organ Toxicity - single exposure

openic rarger organ romeny single exposure						
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure
						Duration
2,4,6(1H,3H,5H)- Pyrimidinetrione, 5- phenyl-1-(phenylmethyl)-,	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,000 mg/kg	
calcium salt (2:1) CALCIUM HYDROXIDE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 2.5 mg/m3	20 minutes

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
SILANE TREATED SILICA	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
NUC - Titanium Dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
NUC - Titanium Dioxide	Inhalation	pulmonary fibrosis	All data are negative	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.

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

# 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:
 29-2268-0
 Version Number:
 4.00

 Issue Date:
 08/31/15
 Supercedes Date:
 06/01/15

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

3M <sup>TM</sup> ESPE <sup>TM</sup> RelyX <sup>TM</sup> UNICEM 2 CLICKER <sup>TM</sup> CATALYST	08/31/15



# **Safety Data Sheet**

Copyright, 2015, 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:
 29-2266-4
 Version Number:
 3.00

 Issue Date:
 09/07/15
 Supercedes Date:
 03/19/15

# **SECTION 1: Identification**

#### 1.1. Product identifier

3MTM ESPETM RelyXTM UNICEM 2 CLICKERTM Base Paste

#### **Product Identification Numbers**

LE-F100-0912-3

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

#### Recommended use

Dental Product, Cement

#### **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 **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 |

Page 1 of 10

# **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.

#### 2.3. Hazards not otherwise classified

None.

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

Ingredient	C.A.S. No.	% by Wt
Glass powder (65997-17-3), surface modified with 2-	None	45 - 55 Trade Secret *
propenoic acid, 2 methyl3-(trimethoxysilyl)propyl ester		
(2530-85-0) and phenyltrimethoxy silane (2996-92-1),		
bulk material		
2-PROPENOIC ACID, 2-METHYL-, 1,1'-[1-	1224866-76-5	20 - 30 Trade Secret *
(HYDROXYMETHYL)-1,2-ETHANEDIYL] ESTER,		
REACTION PRODUCTS WITH 2-HYDROXY-1,3-		
PROPANEDIYL DIMETHACRYLATE AND		
PHOSPHORUS OXIDE		
TRIETHYLENE GLYCOL DIMETHACRYLATE	109-16-0	10 - 20 Trade Secret *
(TEGDMA)		
SILANE TREATED SILICA	68909-20-6	1 - 10 Trade Secret *
SODIUM PERSULFATE	7775-27-1	< 3 Trade Secret *
OXIDE GLASS CHEMICALS (non-fibrous)	65997-17-3	< 3 Trade Secret *
TERT-BUTYL PEROXY-3,5,5-	13122-18-4	< 0.5 Trade Secret *
TRIMETHYLHEXANOATE		
Acetic acid, copper(2+) salt, monohydrate	6046-93-1	< 0.1 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
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

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.

Page 3 of 10

# **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. Do not get in eyes.

# 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

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>
COPPER COMPOUNDS	6046-93-1	ACGIH	TWA(as Cu dust or mist):1	
			mg/m3;TWA(as Cu, fume):0.2	
			mg/m3	
OXIDE GLASS CHEMICALS	65997-17-3	Manufacturer	TWA(as dust):10 mg/m3	
(non-fibrous)		determined		
SILICA, AMORPHOUS	68909-20-6	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	
PERSULFATE COMPOUNDS	7775-27-1	ACGIH	TWA(as persulfate):0.1 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.

Page 4 of 10

# **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: toothcolored paste with slight acrylic odor

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

**Specific Gravity** 2 - 2.2 [*Ref Std*: WATER=1]

Solubility in Water

Solubility- non-water

Partition coefficient: n-octanol/ water

Autoignition temperature

Decomposition temperature

Viscosity

No Data Available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

**Density** 

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

2 - 2.2 g/cm3

#### 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**

Page 5 of 10

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.

#### **Skin Contact:**

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

#### **Eve 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
Glass powder (65997-17-3), surface modified with 2-propenoic	Dermal		LD50 estimated to be > 5,000 mg/kg
acid, 2 methyl3-(trimethoxysilyl)propyl ester (2530-85-0) and			
phenyltrimethoxy silane (2996-92-1), bulk material			
Glass powder (65997-17-3), surface modified with 2-propenoic	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
acid, 2 methyl3-(trimethoxysilyl)propyl ester (2530-85-0) and			
phenyltrimethoxy silane (2996-92-1), bulk material			
2-PROPENOIC ACID, 2-METHYL-, 1,1'-[1-	Ingestion	Rat	LD50 > 2,000 mg/kg
(HYDROXYMETHYL)-1,2-ETHANEDIYL] ESTER,			
REACTION PRODUCTS WITH 2-HYDROXY-1,3-			
PROPANEDIYL DIMETHACRYLATE AND PHOSPHORUS			
OXIDE			
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Ingestion	Rat	LD50 10,837 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
OXIDE GLASS CHEMICALS (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg

# 3M<sup>TM</sup> ESPE<sup>TM</sup> RelyX<sup>TM</sup> UNICEM 2 CLICKER<sup>TM</sup> Base Paste 09/07/15

OXIDE GLASS CHEMICALS (non-fibrous)	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
SODIUM PERSULFATE	Dermal	Rabbit	LD50 > 10,000 mg/kg
SODIUM PERSULFATE	Inhalation-	Rat	LC50 > 47.93 mg/l
	Dust/Mist		
	(4 hours)		
SODIUM PERSULFATE	Ingestion	Rat	LD50 895 mg/kg
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Dermal	Rat	LD50 > 2,000 mg/kg
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Inhalation-	Rat	LC50 > 0.8 mg/l
	Dust/Mist		
	(4 hours)		
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Ingestion	Rat	LD50 12,905 mg/kg

ATE = acute toxicity estimate

# Skin Corrosion/Irritation

Name	Species	Value
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl3-(trimethoxysilyl)propyl ester (2530-85-0) and phenyltrimethoxy silane (2996-92-1), bulk material	Professio nal judgeme nt	No significant irritation
2-PROPENOIC ACID, 2-METHYL-, 1,1'-[1-(HYDROXYMETHYL)-1,2- ETHANEDIYL] ESTER, REACTION PRODUCTS WITH 2-HYDROXY-1,3- PROPANEDIYL DIMETHACRYLATE AND PHOSPHORUS OXIDE	Rabbit	Minimal irritation
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Guinea pig	Mild irritant
SILANE TREATED SILICA	Rabbit	No significant irritation
OXIDE GLASS CHEMICALS (non-fibrous)	Professio nal judgeme nt	No significant irritation
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Rabbit	No significant irritation

**Serious Eve Damage/Irritation** 

Name	Species	Value
Glass powder (65997-17-3), surface modified with 2-propenoic acid, 2 methyl3-(trimethoxysilyl)propyl ester (2530-85-0) and phenyltrimethoxy silane (2996-92-1), bulk material	Professio nal judgeme nt	No significant irritation
2-PROPENOIC ACID, 2-METHYL-, 1,1'-[1-(HYDROXYMETHYL)-1,2- ETHANEDIYL] ESTER, REACTION PRODUCTS WITH 2-HYDROXY-1,3- PROPANEDIYL DIMETHACRYLATE AND PHOSPHORUS OXIDE	Rabbit	Corrosive
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Professio nal judgeme nt	Moderate irritant
SILANE TREATED SILICA	Rabbit	No significant irritation
OXIDE GLASS CHEMICALS (non-fibrous)	Professio nal judgeme nt	No significant irritation
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Rabbit	No significant irritation

# **Skin Sensitization**

Name	Species	Value
2-PROPENOIC ACID, 2-METHYL-, 1,1'-[1-(HYDROXYMETHYL)-1,2-	Guinea	Not sensitizing
ETHANEDIYL] ESTER, REACTION PRODUCTS WITH 2-HYDROXY-1,3-	pig	
PROPANEDIYL DIMETHACRYLATE AND PHOSPHORUS OXIDE		
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Human	Sensitizing
	and	
	animal	
SILANE TREATED SILICA	Human	Not sensitizing
	and	
	animal	
TERT-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	Guinea	Sensitizing

## 3M<sup>TM</sup> ESPE<sup>TM</sup> RelyX<sup>TM</sup> UNICEM 2 CLICKER<sup>TM</sup> Base Paste 09/07/15

nig
nia .
l 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
2-PROPENOIC ACID, 2-METHYL-, 1,1'-[1-(HYDROXYMETHYL)-1,2-ETHANEDIYL] ESTER, REACTION PRODUCTS WITH 2-HYDROXY-1,3-PROPANEDIYL DIMETHACRYLATE AND PHOSPHORUS OXIDE	In Vitro	Not mutagenic
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	In Vitro	Some positive data exist, but the data are not sufficient for classification
SILANE TREATED SILICA	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Dermal	Mouse	Not carcinogenic
SILANE TREATED 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
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Ingestion	Not toxic to development	Mouse	NOAEL 1 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED 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**

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
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 833 mg/kg/day	78 weeks
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	Dermal	blood	All data are negative	Mouse	NOAEL 833 mg/kg/day	78 weeks
SILANE TREATED SILICA	Inhalation	respiratory system   silicosis	All data are negative	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.

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

## 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**

Page 9 of 10

#### 3M<sup>TM</sup> ESPE<sup>TM</sup> RelyX<sup>TM</sup> UNICEM 2 CLICKER<sup>TM</sup> Base Paste 09/07/15

NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 1 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:
 29-2266-4
 Version Number:
 3.00

 Issue Date:
 09/07/15
 Supercedes Date:
 03/19/15

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

Page 10 of 10