

Safety Data Sheet

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Document group:	29-6283-5	Version number:	1.00
Issue Date:	2023/08/09	Supercedes Date:	Initial Issue

SECTION 1: Identification

1.1. Product identifier

3MTM RelyXTM Luting Plus Automix Cement (3535/3535TK/3535SK)

 Product Identification Numbers

 70-2010-8554-8
 70-2010-8555-5
 70-2010-8557-1

1.2. Recommended use and restrictions on use

Recommended use Dental product, Dental luting cement

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

Company:	3M Canada Company	
Division:	Oral Care Solutions Division	
Address:	1840 Oxford Street East, Post Office Box 5757, London, Ontario	N6A 4T1

Telephone:	(800) 364-3577
E Mail:	

1.4. Emergency telephone number

Medical Emergency Telephone:1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS) or Article Information Sheet (AIS) 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:

29-6234-8, 29-6280-1

Transport in accordance with applicable regulations.

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer MAKES NO WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO,

ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF PERFORMANCE, COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 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 product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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Safety Data Sheet

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Document group:	29-6280-1	Version number:	1.00
Issue Date:	2023/08/09	Supercedes Date:	Initial Issue

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

1.1. Product identifier

3MTM RelyXTM Luting Plus Cement Paste B

1.2. Recommended use and restrictions on use

Intended Use Dental Product

Specific Use Luting cement

Restrictions on use For use only by dental professionals

1.3. Supplier's details

Company:	3M Canada Company	
Division:	Oral Care Solutions Division	
Address:	1840 Oxford Street East, Post Office Box 5757, London, Ontario	N6A 4T1
Telephone:	(800) 364-3577	
Website:	www.3M.ca	

1.4. Emergency telephone number

Medical Emergency Telephone:1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

This product is exempt from hazard classification according to Canadian Hazardous Products Regulations for the following reason(s):

Cosmetic, device, drug or food as defined in section 2 of the Food and Drugs Act;

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2A. Respiratory Sensitizer: Category 1. Skin Sensitizer: Category 1. **2.2. Label elements Signal word** Danger

Symbols Exclamation mark | Health Hazard |

Pictograms



Hazard statements

Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Precautionary statements

Prevention:

Avoid breathing dust/fume/gas/mist/vapours/spray. In case of inadequate ventilation wear respiratory protection. Wear protective gloves and eye/face protection. Wash exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician. 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. Take off contaminated clothing and wash it before reuse.

Disposal:

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

2.3. Other hazards

None known.

88% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	Common Name
Silane Treated Ceramic	444758-98-9	30 - 40 Trade Secret *	No Data Available
2-Hydroxyethyl Methacrylate	868-77-9	10 - 30 Trade Secret *	2-Propenoic acid, 2-methyl-, 2-
(HEMA)			hydroxyethyl ester
Copolymer of Acrylic and	25948-33-8	10 - 30 Trade Secret *	Butanedioic acid, methylene-, polymer
Itaconic Acids			with 2-propenoic acid
Water	7732-18-5	5 - 15 Trade Secret *	Water
Glycerol 1,3 Dimethacrylate	1830-78-0	1 - 5 Trade Secret *	2-Propenoic acid, 2-methyl-, 2-hydroxy-
			1,3-propanediyl ester
Potassium Diphosphate	7778-77-0	1 - 5 Trade Secret *	Phosphoric acid, monopotassium salt

Potassium Persulfate	7727-21-1	1 - 5 Trade Secret *	No Data Available
2,6-Di-Tert-Butyl-P-Cresol (BHT)	128-37-0		Phenol, 2,6-bis(1,1-dimethylethyl)-4- methyl-
Ethylene Dimethacrylate (EGDMA)	97-90-5	< 0.5 Trade Secret *	No Data Available

*The actual concentration of this ingredient 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:

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

Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching).

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u> Carbon monoxide Carbon dioxide <u>Condition</u> During Combustion During Combustion

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Avoid breathing dust/fume/gas/mist/vapours/spray. 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. 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	Additional Comments
2,6-Di-Tert-Butyl-P-Cresol	128-37-0	ACGIH	TWA(inhalable fraction and	
(BHT)			vapor):2 mg/m3	
Persulfate Compounds	7727-21-1	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

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

Specific Physical Form:PasteColourTransparent YellowOdourCharacteristic OdourOdour thresholdNo Data AvailablepHNo Data AvailableMelting point/Freezing pointNot ApplicableBoiling pointNot ApplicableFlash PointNo flash pointEvaporation rateNo Data AvailableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableVapour PressureNo Data AvailableVapour Density and/or Relative Vapour DensityNo Data AvailableDensity1.5 g/cm3Relative density1.5 [Ref Std:WATER=1]Water solubilityNegligible	
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Relative density 1.5 [Ref Std:WATER=1] Water solubility Negligible	
Water solubility Negligible	
Solubility- non-water No Data Available	
Partition coefficient: n-octanol/ water No Data Available	
Autoignition temperature No Data Available	
Decomposition temperature No Data Available	
Viscosity/Kinematic Viscosity No Data Available	
Volatile Organic Compounds Not Applicable	
Percent volatile No Data Available	
VOC Less H2O & Exempt Solvents No Data Available	
Molecular weight Not Applicable	

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid Heat

10.5. Incompatible materials None known.

10.6. Hazardous decomposition products

<u>Substance</u>

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure. 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:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

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:

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	Inhalation- Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >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
Copolymer of Acrylic and Itaconic Acids	Ingestion	Rat	LD50 > 5,000 mg/kg
Copolymer of Acrylic and Itaconic Acids	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
2-Hydroxyethyl Methacrylate (HEMA)	Dermal	Rabbit	LD50 > 5,000 mg/kg
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Rat	LD50 5,564 mg/kg
Glycerol 1,3 Dimethacrylate	Ingestion	Rat	LD50 > 2,000 mg/kg

Dermal	Rabbit	LD50 > 4,640 mg/kg
Ingestion	Rat	LD50 > 4,640 mg/kg
Dermal	Rabbit	LD50 > 10,000 mg/kg
Ingestion	Rat	LD50 1,130 mg/kg
Inhalation-	similar	LC50 > 5.1 mg/l
Dust/Mist	compoun	_
(4 hours)	ds	
Dermal	Professio	LD50 estimated to be 2,000 - 5,000 mg/kg
	nal	
	judgeme	
	nt	
Ingestion	Rat	LD50 3,300 mg/kg
Dermal	Rat	LD50 > 2,000 mg/kg
Ingestion	Rat	LD50 > 2,930 mg/kg
	Ingestion Dermal Ingestion Inhalation- Dust/Mist (4 hours) Dermal Ingestion Dermal	Ingestion Rat Dermal Rabbit Ingestion Rat Inhalation- similar Dust/Mist compoun (4 hours) ds Dermal Profession nal judgeme nt Ingestion Rat Rat

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Silane Treated Ceramic	similar	No significant irritation
	compoun	
	ds	
2-Hydroxyethyl Methacrylate (HEMA)	Rabbit	Minimal irritation
Glycerol 1,3 Dimethacrylate	Rabbit	No significant irritation
Potassium Persulfate	Rabbit	No significant irritation
Ethylene Dimethacrylate (EGDMA)	Professio	Mild irritant
	nal	
	judgeme	
	nt	
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Human	Minimal irritation
	and	
	animal	

Serious Eye Damage/Irritation

Name	Species	Value
Silane Treated Ceramic	similar	Mild irritant
	compoun	
	ds	
2-Hydroxyethyl Methacrylate (HEMA)	Rabbit	Moderate irritant
Glycerol 1,3 Dimethacrylate	In vitro	Severe irritant
	data	
Potassium Persulfate	Rabbit	No significant irritation
Ethylene Dimethacrylate (EGDMA)	Not	Moderate irritant
	available	
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Silane Treated Ceramic	similar	Not classified
	compoun	
	ds	
2-Hydroxyethyl Methacrylate (HEMA)	Human	Sensitizing
	and	
	animal	
Glycerol 1,3 Dimethacrylate	Mouse	Not classified
Potassium Persulfate	Mouse	Sensitizing
Ethylene Dimethacrylate (EGDMA)	Guinea	Sensitizing
	pig	
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Human	Not classified

Respiratory Sensitization

Name	Species	Value

Potassium Persulfate	Human	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value
2-Hydroxyethyl Methacrylate (HEMA)	In vivo	Not mutagenic
2-Hydroxyethyl Methacrylate (HEMA)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Potassium Persulfate	In Vitro	Not mutagenic
Ethylene Dimethacrylate (EGDMA)	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,6-Di-Tert-Butyl-P-Cresol (BHT)	In Vitro	Not mutagenic
2,6-Di-Tert-Butyl-P-Cresol (BHT)	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Silane Treated Ceramic	Inhalation	similar compoun ds	Some positive data exist, but the data are not sufficient for classification
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	49 days
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	Not classified for female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure
						Duration
Copolymer of Acrylic and	Ingestion	nervous system	Not classified	Rat	NOAEL	
Itaconic Acids	-	-			5,000 mg/kg	
Potassium Persulfate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not	
				and	available	
				animal		
Ethylene Dimethacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	official	NOAEL Not	
(EGDMA)				classifica	available	
				tion		

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	

Copolymer of Acrylic and Itaconic Acids	Ingestion	endocrine system hematopoietic system liver	Not classified	Rat	NOAEL 200 mg/kg/day	28 days
Copolymer of Acrylic and Itaconic Acids	Ingestion	heart bone, teeth, nails, and/or hair immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 2,000 mg/kg/day	28 days
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 250 mg/kg/day	28 days
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 500 mg/kg/day	2 generation
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	blood	Not classified	Rat	LOAEL 420 mg/kg/day	40 days
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	endocrine system	Not classified	Rat	NOAEL 25 mg/kg/day	2 generation
2,6-Di-Tert-Butyl-P-Cresol (BHT)	Ingestion	heart	Not classified	Mouse	NOAEL 3,480 mg/kg/day	10 weeks

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

No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility.

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. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this product are in compliance with the new substance notification requirements of CEPA.

SECTION 16: Other information

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.

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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Issue Date:	2023/08/09	Supercedes Date:	Initial Issue

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

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Safety Data Sheet

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Issue Date:	2023/08/09	Supercedes Date:	Initial Issue

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

SECTION 1: Identification		SECTION	1: Identification
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1.1. Product identifier

3M[™] RelyX[™] Luting Plus Cement Paste A

1.2. Recommended use and restrictions on use

Intended Use Dental Product

Specific Use Luting cement

Restrictions on use For use only by dental professionals

1.3. Supplier's details

Company:	3M Canada Company	
Division:	Oral Care Solutions Division	
Address:	1840 Oxford Street East, Post Office Box 5757, London, Ontario	N6A 4T1
Telephone:	(800) 364-3577	
Website:	www.3M.ca	

1.4. Emergency telephone number

Medical Emergency Telephone:1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

This product is exempt from hazard classification according to Canadian Hazardous Products Regulations for the following reason(s):

Cosmetic, device, drug or food as defined in section 2 of the Food and Drugs Act;

2.1. Classification of the substance or mixture

Skin Sensitizer: Category 1.

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. Take off contaminated clothing and wash it before reuse.

Disposal:

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

2.3. Other hazards

None known.

72% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt	Common Name
Silane Treated Glass	2949431-15-4	70 - 80 Trade Secret *	No Data Available
Water	7732-18-5	10 - 20 Trade Secret *	Water
2-Hydroxyethyl Methacrylate (HEMA)	868-77-9	< 10 Trade Secret *	2-Propenoic acid, 2-methyl-, 2- hydroxyethyl ester
Silane Treated Silica	68909-20-6	< 2 Trade Secret *	Silanamine, 1,1,1-trimethyl-N- (trimethylsilyl)-, hydrolysis products with silica
4-(Dimethylamino)- Benzeneethanol	50438-75-0	< 1 Trade Secret *	No Data Available
Allylthiourea	109-57-9	< 0.5 Trade Secret *	No Data Available
Titanium Oxide	13463-67-7	< 0.5 Trade Secret *	Titanium oxide (TiO2)

*The actual concentration of this ingredient 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:

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, 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

Allergic skin reaction (redness, swelling, blistering, and itching).

4.3. Indication of any immediate medical attention and special treatment required Net applicable

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>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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 vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate

commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. 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	Additional Comments
Titanium Oxide	13463-67-7	ACGIH	TWA(Respirable nanoscale	
			particles):0.2	
			mg/m3;TWA(Respirable	
			finescale particles):2.5 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

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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

Physical state	Solid	
Specific Physical Form:	Paste	
Colour	Off-White, Yellow	
Odour	Characteristic Odour	
Odour threshold	No Data Available	
рН	No Data Available	
Melting point/Freezing point	No Data Available	

Boiling point	No Data Available
Flash Point	No flash point
Evaporation rate	No Data Available
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapour Pressure	No Data Available
Vapour Density and/or Relative Vapour Density	No Data Available
Density	1.5 g/cm3
Relative density	1.5 [<i>Ref Std</i> :WATER=1]
Water solubility	Negligible
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity/Kinematic Viscosity	No Data Available
Volatile Organic Compounds	No Data Available
Percent volatile	No Data Available
VOC Less H2O & Exempt Solvents	No Data Available
Molecular weight	Not Applicable

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

Heat

10.5. Incompatible materials None known.

None known.

10.6. Hazardous decomposition products

<u>Substance</u>

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of

the hazards communicated in this document may vary depending on the potential for exposure. 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 odour; however, no adverse health effects are anticipated.

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

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

Ingestion:

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

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
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	Ingestion		No data available; calculated ATE >5,000 mg/kg
2-Hydroxyethyl Methacrylate (HEMA)	Dermal	Rabbit	LD50 > 5,000 mg/kg
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Rat	LD50 5,564 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
Titanium Oxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium Oxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium Oxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Allylthiourea	Ingestion	Rat	LD50 200 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
2-Hydroxyethyl Methacrylate (HEMA)	Rabbit	Minimal irritation

3MTM RelyXTM Luting Plus Cement Paste A
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Silane Treated Silica	Rabbit	No significant irritation
Titanium Oxide	Rabbit	No significant irritation
Allylthiourea	Professio	Minimal irritation
	nal	
	judgeme	
	nt	

Serious Eye Damage/Irritation

Name	Species	Value
2-Hydroxyethyl Methacrylate (HEMA)	Rabbit	Moderate irritant
Silane Treated Silica	Rabbit	No significant irritation
Titanium Oxide	Rabbit	No significant irritation
Allylthiourea	Professio	Mild irritant
	nal	
	judgeme	
	nt	

Skin Sensitization

Name	Species	Value
2-Hydroxyethyl Methacrylate (HEMA)	Human	Sensitizing
	and	
	animal	
Silane Treated Silica	Human	Not classified
	and	
	animal	
Titanium Oxide	Human	Not classified
	and	
	animal	
Allylthiourea	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
2-Hydroxyethyl Methacrylate (HEMA)	In vivo	Not mutagenic
2-Hydroxyethyl Methacrylate (HEMA)	In Vitro	Some positive data exist, but the data are not sufficient for classification
Silane Treated Silica	In Vitro	Not mutagenic
Titanium Oxide	In Vitro	Not mutagenic
Titanium Oxide	In vivo	Not mutagenic
Allylthiourea	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Silane Treated Silica	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
Titanium Oxide	Ingestion	Multiple	Not carcinogenic
	-	animal	
		species	
Titanium Oxide	Inhalation	Rat	Carcinogenic
Allylthiourea	Ingestion	Rat	Some positive data exist, but the data are not
	_		sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure

					Duration
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	49 days
2-Hydroxyethyl Methacrylate (HEMA)	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Silane Treated Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silane Treated Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silane Treated Silica	Ingestion	Not classified for 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
Silane Treated Silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Titanium Oxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
Titanium Oxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Allylthiourea	Ingestion	endocrine system	Not classified	Rat	NOAEL 23 mg/kg/day	15 months

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

No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

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. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this product are in compliance with the new substance notification requirements of CEPA.

SECTION 16: Other information

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.

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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