

Safety Data Sheet

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Issue Date:	03/13/15	Supercedes Date:	07/30/03

Product identifier

35014 3MTM ESPETM RELYXTM TEMPORARY CEMENT EUGENOL NP

ID Number(s):

70-2011-1533-7

Recommended use

Dental Product, Temporary 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:

18-0580-3, 18-0593-6

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Document Group:	18-0593-6	Version Number:	5.00
Issue Date:	10/27/14	Supercedes Date:	06/29/04

SECTION 1: Identification

1.1. Product identifier

 $3M^{TM}$ ESPETM RELYXTM TEMP E Base

Product Identification Numbers LE-FBAS-3501-4

1.2. Recommended use and restrictions on use

Recommended use Dental Product, Temporary 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

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements Signal word Not applicable.

Symbols Not applicable.

Pictograms

Not applicable.

2.3. Hazards not otherwise classified None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
ZINC OXIDE	1314-13-2	50 - 60 Trade Secret *
WHITE MINERAL OIL (PETROLEUM)	8042-47-5	20 - 30 Trade Secret *
PETROLATUM	8009-03-8	20 - 30 Trade Secret *

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

Wash with soap and water. 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 <u>Condition</u> 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

Ventilate the area with fresh air. 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

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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
ZINC OXIDE	1314-13-2	ACGIH	TWA(respirable fraction):2	
			mg/m3;STEL(respirable	
			fraction):10 mg/m3	
ZINC OXIDE	1314-13-2	OSHA	TWA(as fume):5	
			mg/m3;TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3	
MINERAL OILS, HIGHLY-	8009-03-8	ACGIH	TWA(inhalable fraction):5	A4: Not class. as human
REFINED OILS			mg/m3	carcin
Paraffin oil	8009-03-8	OSHA	TWA(as mist):5 mg/m3	
WHITE MINERAL OIL	8042-47-5	CMRG	TWA:5 mg/m3;STEL:10	
(PETROLEUM)			mg/m3	
MINERAL OILS, HIGHLY-	8042-47-5	ACGIH	TWA(inhalable fraction):5	A4: Not class. as human
REFINED OILS			mg/m3	carcin
Paraffin oil	8042-47-5	OSHA	TWA(as mist):5 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.

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:	odorless paste, slight rose color
Odor threshold	No Data Available
рН	Not Applicable
Melting point	Not Applicable
Boiling Point	Not Applicable
Flash Point	Flash point > 93 °C (200 °F)
Evaporation rate	No Data Available
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	No Data Available
Vapor Density	No Data Available
Density	No Data Available
Specific Gravity	>= 1 [<i>Ref Std:</i> WATER=1]
Solubility in Water	Negligible
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Volatile Organic Compounds	No Data Available
Percent volatile	No Data Available
VOC Less H2O & Exempt Solvents	No Data Available

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability Stable.

10.3. Possibility of hazardous reactions Hazardous polymerization will not occur.

10.4. Conditions to avoid 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:

No health effects are expected.

Skin Contact:

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

Eye Contact:

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

Ingestion:

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

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

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Acute Toxicity

Route	Species	Value
Ingestion		No data available; calculated ATE > 5,000 mg/kg
Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Inhalation-	Rat	LC50 > 5.7 mg/l
Dust/Mist		
(4 hours)		
Ingestion	Rat	LD50 > 5,000 mg/kg
Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Dermal	Rabbit	LD50 > 2,000 mg/kg
Ingestion	Rat	LD50 > 5,000 mg/kg
Ingestion	Rat	LD50 > 5,000 mg/kg
	Ingestion Dermal Inhalation- Dust/Mist (4 hours) Ingestion Dermal Dermal Ingestion	Ingestion Dermal Inhalation- Dust/Mist (4 hours) Ingestion Rat Dermal Dermal Rabbit Ingestion Rat

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
ZINC OXIDE	Human	No significant irritation
	and	
	animal	
WHITE MINERAL OIL (PETROLEUM)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
ZINC OXIDE	Rabbit	Mild irritant
WHITE MINERAL OIL (PETROLEUM)	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
ZINC OXIDE	Guinea	Some positive data exist, but the data are not
	pig	sufficient for classification
WHITE MINERAL OIL (PETROLEUM)	Guinea	Not sensitizing
	pig	

Respiratory Sensitization

 Name
 Species
 Value

Germ Cell Mutagenicity

Name	Route	Value
ZINC OXIDE	In Vitro	Some positive data exist, but the data are not sufficient for classification
ZINC OXIDE	In vivo	Some positive data exist, but the data are not sufficient for classification
WHITE MINERAL OIL (PETROLEUM)	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
WHITE MINERAL OIL (PETROLEUM)	Dermal	Mouse	Not carcinogenic
WHITE MINERAL OIL (PETROLEUM)	Inhalation	Multiple	Not carcinogenic
		animal	
		species	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure
					Duration
ZINC OXIDE	Ingestion	Some positive	Multiple	NOAEL 125	premating &
		reproductive/developmental data exist,	animal	mg/kg/day	during
		but the data are not sufficient for	species		gestation
		classification	-		-
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Not toxic to female reproduction	Rat	NOAEL	13 weeks
	-	-		4,350	

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				mg/kg/day	
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Not toxic to male reproduction	Rat	NOAEL	13 weeks
				4,350	
				mg/kg/day	
WHITE MINERAL OIL (PETROLEUM)	Ingestion	Not toxic to development	Rat	NOAEL	during
	_	_		4,350	gestation
				mg/kg/day	-

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure
						Duration

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ZINC OXIDE	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	10 days
ZINC OXIDE	Ingestion	endocrine system hematopoietic system kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Other	NOAEL 500 mg/kg/day	6 months
WHITE MINERAL OIL (PETROLEUM)	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,381 mg/kg/day	90 days
WHITE MINERAL OIL (PETROLEUM)	Ingestion	liver immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,336 mg/kg/day	90 days

Aspiration Hazard

Name	Value
WHITE MINERAL OIL (PETROLEUM)	Aspiration hazard

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 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.

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 - No Delayed Hazard - No

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	C.A.S. No	<u>% by Wt</u>
ZINC OXIDE (ZINC COMPOUNDS)	1314-13-2	50 - 60

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

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Document Group:	18-0580-3	Version Number:	4.00
Issue Date:	11/04/14	Supercedes Date:	08/29/11

SECTION 1: Identification

1.1. Product identifier

3MTM ESPETM RELYXTM TEMP E NP Activator

Product Identification Numbers LE-FACT-3501-4

1.2. Recommended use and restrictions on use

Recommended use Dental Product, Temporary 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 2B. Skin Sensitizer: Category 1.

2.2. Label elements Signal word Warning

Symbols Exclamation mark |

Pictograms



Hazard Statements Causes eye irritation. May cause an allergic skin reaction.

Precautionary Statements

Prevention:

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
HYDROGENATED ROSIN	65997-06-0	20 - 30 Trade Secret *
EUGENOL	97-53-0	20 - 30 Trade Secret *
SILANE TREATED SILICA	68611-44-9	10 - 20 Trade Secret *
OLEIC ACID	112-80-1	1 - 10 Trade Secret *

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u>	Condition
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Irritant Vapors or Gases	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

Ventilate the area with fresh air. 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

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. Avoid release to the environment. Wash contaminated clothing before reuse. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Solid			
Specific Physical Form:	Paste			
Odor, Color, Grade:	Yellowish paste with characteristic odor			
Odor threshold	No Data Available			
рН	Not Applicable			
Melting point	Not Applicable			
Boiling Point	Not Applicable			
Flash Point	Flash point $> 93 \degree C (200 \degree F)$			
Evaporation rate	No Data Available			
Flammability (solid, gas)	Not Classified			
Flammable Limits(LEL)	No Data Available			
Flammable Limits(UEL)	No Data Available			
Vapor Pressure	No Data Available			
Vapor Density	No Data Available			
Specific Gravity	1.05 - 1.25 [<i>Ref Std:</i> WATER=1]			
Solubility in Water	Negligible			
Solubility- non-water	No Data Available			
Partition coefficient: n-octanol/ water	No Data Available			
Autoignition temperature	No Data Available			
Decomposition temperature	No Data Available			
Viscosity	No Data Available			

Volatile Organic Compounds Percent volatile VOC Less H2O & Exempt Solvents No Data Available No Data Available No Data Available

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability Stable.

10.3. Possibility of hazardous reactions Hazardous polymerization will not occur.

10.4. Conditions to avoid None known.

10.5. Incompatible materials None known.

10.6. Hazardous decomposition products

Substance 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 odor; however, no adverse health effects are anticipated.

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo

induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

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

Ingestion:

May be harmful if swallowed.

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

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000
-	_		mg/kg
EUGENOL	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
EUGENOL	Inhalation-	Rat	LC50 > 2.58 mg/l
	Dust/Mist		
	(4 hours)		
HYDROGENATED ROSIN	Dermal	Rabbit	LD50 > 2,500 mg/kg
HYDROGENATED ROSIN	Ingestion	Rat	LD50 > 31,500 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
OLEIC ACID	Dermal	Guinea	LD50 > 3,000 mg/kg
		pig	
OLEIC ACID	Ingestion	Rat	LD50 57,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
EUGENOL		Minimal irritation
HYDROGENATED ROSIN	Rabbit	Minimal irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
OLEIC ACID	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
EUGENOL		Mild irritant
HYDROGENATED ROSIN	Rabbit	Moderate irritant
SILANE TREATED SILICA	Rabbit	No significant irritation
OLEIC ACID	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
EUGENOL	Multiple	Sensitizing
	animal	
	species	
HYDROGENATED ROSIN	Guinea	Not sensitizing
	pig	
SILANE TREATED SILICA	Human	Not sensitizing
	and	
	animal	

Respiratory Sensitization

Name	Species	Value

Germ Cell Mutagenicity

Name	Route	Value
EUGENOL	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
SILANE TREATED SILICA	In Vitro	Not mutagenic
OLEIC ACID	In Vitro	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

Name	Route	Species	Value
EUGENOL	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
HYDROGENATED ROSIN	Ingestion	Rat	Not carcinogenic
SILANE TREATED SILICA	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
OLEIC ACID	Dermal	Mouse	Not carcinogenic
OLEIC ACID	Ingestion	Rat	Not carcinogenic
OLEIC ACID	Not Specified	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
HYDROGENATED ROSIN	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	90 days
HYDROGENATED ROSIN	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	90 days
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

Name Route Target Organ(s) Value Species Test Result Exposure Duration
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Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
EUGENOL	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 900 mg/kg/day	4 days
EUGENOL	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,400 mg/kg	34 days
EUGENOL	Ingestion	blood	All data are negative	Rat	NOAEL 500 mg/kg/day	19 weeks
HYDROGENATED ROSIN	Ingestion	hematopoietic system liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	90 days
HYDROGENATED ROSIN	Ingestion	heart endocrine system bone marrow immune system nervous system respiratory	All data are negative	Rat	NOAEL 1,000 mg/kg/day	90 days

		system				
SILANE TREATED	Inhalation	respiratory system	All data are negative	Human	NOAEL Not	occupational
SILICA		silicosis			available	exposure
OLEIC ACID	Ingestion	liver immune	Some positive data exist, but the	Rat	NOAEL	108 weeks
	_	system	data are not sufficient for		2,250	
			classification		mg/kg/day	
OLEIC ACID	Ingestion	hematopoietic	All data are negative	Rat	NOAEL	108 weeks
		system			2,550	
					mg/kg/day	

Aspiration Hazard

Name

Value

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 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.

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

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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