



## Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

### IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

56660 3M ESPE™ RELYX™ TEMPORARY CEMENT NONEUGENOL NP

#### Product identification numbers

70-2011-1531-1

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Dental Product

#### 1.3. Details of the supplier of the substance or mixture

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**E Mail:** [tox.uk@mmm.com](mailto:tox.uk@mmm.com)

**Website:** [www.3M.com/uk](http://www.3M.com/uk)

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

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

18-0582-9, 18-0590-2

### TRANSPORTATION INFORMATION

### KIT LABEL

#### 2.2. Label elements

**Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive**

**Symbol(s)**



Dangerous  
for the  
environment

**Contains:**

Consult the component labels for disclosable ingredients.

**Risk phrases**

R50/53                      Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**Safety phrases**

S61                          Avoid release to the environment. Refer to special instructions/safety data sheets.

**Notes on labelling**

This product is exempt from labelling per Directive 1999/45/EC as it is defined as a medical device according to Directive 93/42/EEC and is invasive or comes into contact with the human body.

R65 is not required on the label due to the product's viscosity.

C; R34 removed due to test data indicating that product does not meet corrosion and irritation criteria. Nota N applied to CAS# 8009-03-8

**Revision information:**

No revision information is available.



## Safety Data Sheet

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<b>Transportation version number:</b>	1.00 (28/06/2013)		

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

3M ESPE™ RELYX™ TEMP NE NP BASE PASTE

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Identified uses

Dental Material

#### 1.3. Details of the supplier of the substance or mixture

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**E Mail:** tox.uk@mmm.com

**Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

This material is exempt from hazard classification according to Regulation (EC) No. 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

#### Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

##### Indication of danger

Dangerous for the environment; N; R50/53

For full text of R phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

## 3M ESPE™ RELYX™ TEMP NE NP BASE PASTE

### Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

#### Symbol(s)



Dangerous  
for the  
environment

#### Contains:

No ingredients are assigned to the label.

#### Risk phrases

R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

#### Safety phrases

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Notes on labelling

This product is exempt from labelling per Directive 1999/45/EC as it is defined as a medical device according to Directive 93/42/EEC and is invasive or comes into contact with the human body.

R65 is not required on the label due to the product's viscosity.

Nota N applied for CAS# 8009-03-8.

#### 2.3. Other hazards

None known.

## SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Zinc oxide	1314-13-2	EINECS 215-222-5	80 - 90	N:R50/53 (EU)  Aquatic Acute 1, H400,M=10; Aquatic Chronic 1, H410,M=1 (CLP)
White mineral oil (petroleum)	8042-47-5	EINECS 232-455-8	5 - 15	Xn:R65 (Self Classified)  Asp. Tox. 1, H304 (Self Classified)
Petrolatum	8009-03-8	EINECS 232-373-2	1 - 5	Nota N (EU)  Nota N (CLP)

Please see section 16 for the full text of any R phrases and H statements referred to in this section

Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

## 3M ESPE™ RELYX™ TEMP NE NP BASE PASTE

### Inhalation

No need for first aid is anticipated.

### 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. Extinguishing media

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

### 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. Advice for fire-fighters

No unusual fire or explosion hazards 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.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

## 3M ESPE™ RELYX™ TEMP NE NP BASE PASTE

### 7.1. Precautions for safe handling

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

Store away from heat.

### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

## 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 Safety Data Sheet.

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

#### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

The following eye protection(s) are recommended: Safety glasses with side shields.

##### Skin/hand protection

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.

##### 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
Appearance/Odour	Odourless, whitish, opaque paste
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Boiling point/boiling range	<i>Not applicable.</i>
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	No flash point
Autoignition temperature	<i>No data available.</i>
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>

## 3M ESPE™ RELYX™ TEMP NE NP BASE PASTE

Vapour pressure	No data available.
Relative density	> 1 [Ref Std: WATER=1]
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	Not applicable.
Evaporation rate	Not applicable.
Vapour density	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

### 9.2. Other information

Volatile organic compounds (VOC)	No data available.
VOC less H <sub>2</sub> O & 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 polymerisation 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>
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None known.

## 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 labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 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:

**3M ESPE™ RELYX™ TEMP NE NP BASE PASTE****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 diarrhoea.

**Toxicological Data****Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		Data not available or insufficient for classification; calculated ATE >5,000 mg/kg
Zinc oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Zinc oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.7 mg/l
Zinc oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
White mineral oil (petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White mineral oil (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Petrolatum	Dermal		LD50 estimated to be > 5,000 mg/kg
Petrolatum	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Zinc oxide	Human and animal	No significant irritation
White mineral oil (petroleum)	Rabbit	No significant irritation
Petrolatum		Data not available or insufficient for classification

**Serious Eye Damage/Irritation**

Name	Species	Value
Zinc oxide	Rabbit	Mild irritant
White mineral oil (petroleum)	Rabbit	Mild irritant
Petrolatum		Data not available or insufficient for classification

**Skin Sensitisation**

Name	Species	Value
Zinc oxide	Guinea pig	Some positive data exist, but the data are not sufficient for classification
White mineral oil (petroleum)	Guinea pig	Not sensitizing
Petrolatum		Data not available or insufficient for classification

**Respiratory Sensitisation**

Name	Species	Value
Zinc oxide		Data not available or insufficient for classification
White mineral oil (petroleum)		Data not available or insufficient for classification



**3M ESPE™ RELYX™ TEMP NE NP BASE PASTE**

Petrolatum		Data not available or insufficient for classification
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**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
Petrolatum		Data not available or insufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Zinc oxide			Data not available or insufficient for classification
White mineral oil (petroleum)	Dermal	Mouse	Not carcinogenic
White mineral oil (petroleum)	Inhalation	Multiple animal species	Not carcinogenic
Petrolatum			Data not available or insufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Zinc oxide	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 125 mg/kg/day	prematuring & during gestation
White mineral oil (petroleum)	Ingestion	Not toxic to female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil (petroleum)	Ingestion	Not toxic to male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil (petroleum)	Ingestion	Not toxic to development	Rat	NOAEL 4,350 mg/kg/day	during gestation
Petrolatum		Data not available or insufficient for classification			

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
White mineral oil (petroleum)			Data not available or insufficient for classification			
Petrolatum			Data not available or insufficient for classification			

**Specific Target Organ Toxicity - repeated exposure**

**3M ESPE™ RELYX™ TEMP NE NP BASE PASTE**

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
Petrolatum			Data not available or insufficient for classification			

**Aspiration Hazard**

Name	Value
Zinc oxide	Not an aspiration hazard
White mineral oil (petroleum)	Aspiration hazard
Petrolatum	Not an 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**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

**12.1. Toxicity**

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Petrolatum	8009-03-8	Rainbow trout	Estimated	96 hours	LC50	>1,000 mg/l
Zinc oxide	1314-13-2	Green Algae	Experimental	72 hours	EC50	0.046 mg/l
Zinc oxide	1314-13-2	Chinook Salmon	Experimental	96 hours	LC50	0.23 mg/l
White mineral oil (petroleum)	8042-47-5		Data not available or insufficient for classification			

**3M ESPE™ RELYX™ TEMP NE NP BASE PASTE****12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Zinc oxide	1314-13-2	Estimated Hydrolysis		Hydrolytic half-life	10 hours (t 1/2)	Other methods
Petrolatum	8009-03-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**12.3 : Bioaccumulative potential**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Petrolatum	8009-03-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Zinc oxide	1314-13-2	Experimental BCF - Other	56 days	Bioaccumulation factor	<217	OECD 305E - Bioaccumulation flow-through fish test

**12.4. Mobility in soil**

Please contact manufacturer for more details

**12.5. Results of the PBT and vPvB assessment**

No information available at this time, contact manufacturer for more details

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

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

Incinerate uncured product in a permitted waste incineration facility. Dispose of completely cured (or polymerised) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC

## 3M ESPE™ RELYX™ TEMP NE NP BASE PASTE

and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

### EU waste code (product as sold)

180106\* Chemicals consisting of or containing dangerous substances.

## SECTION 14: Transportation information

IMDG: UN3077 Environmentally Hazardous Substance, Solid, N.O.S. (Zinc oxide); 9; III, EmS: F-A, S-F

IATA: UN3077 Environmentally Hazardous Substance, Solid, N.O.S. (Zinc oxide); 9; III

ADR: UN3077 Environmentally Hazardous Substance, Solid, N.O.S. (Zinc oxide); 9; III; (E); M7

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

### 15.2. Chemical Safety Assessment

Not applicable

## SECTION 16: Other information

### List of relevant H statements

H304	May be fatal if swallowed and enters airways.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### List of relevant R-phrases

R50/53	Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
R65	Harmful: May cause lung damage if swallowed.

### Revision information:

No revision information is available.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M United Kingdom MSDSs are available at [www.3M.com/uk](http://www.3M.com/uk)



## Safety Data Sheet

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<b>Transportation version number:</b>	1.00 (28/06/2013)		

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Identified uses

Dental Material

#### 1.3. Details of the supplier of the substance or mixture

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

**E Mail:** tox.uk@mmm.com

**Website:** www.3M.com/uk

#### 1.4. Emergency telephone number

+44 (0)1344 858 000

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

##### CLASSIFICATION:

This material is exempt from hazard classification according to Regulation (EC) No. 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

##### Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

##### Indication of danger

Dangerous for the environment; R52

For full text of R phrases, see Section 16.

#### 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

## 3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE

### Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

#### Symbol(s)

None.

#### Contains:

No ingredients are assigned to the label.

#### Risk phrases

R52 Harmful to aquatic organisms.

#### Safety phrases

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Notes on labelling

This product is exempt from labelling per Directive 1999/45/EC as it is defined as a medical device according to Directive 93/42/EEC and is invasive or comes into contact with the human body.

C; R34 removed due to test data indicating that product does not meet corrosion and irritation criteria.

### 2.3. Other hazards

None known.

## SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Rosin, reaction products with acrylic acid	83137-13-7	EINECS 280-192-2	60 - 70	
Nonanoic Acid	112-05-0	EINECS 203-931-2	30 - 40	C:R34 (EU) R52 (Self Classified)  Skin Corr. 1B, H314 (CLP)
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	EINECS 272-697-1	1 - 5	

Please see section 16 for the full text of any R phrases and H statements referred to in this section

Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

## 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

## 3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE

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. Extinguishing media**

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

### **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>
Formaldehyde	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.

### **5.3. Advice for fire-fighters**

No unusual fire or explosion hazards are anticipated.

## SECTION 6: Accidental release measures

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

Ventilate the area with fresh air. Observe precautions from other sections.

### **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 with detergent and water. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

### **6.4. Reference to other sections**

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

Avoid eye contact. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

### **7.2. Conditions for safe storage including any incompatibilities**

Store away from heat.

### **7.3. Specific end use(s)**

## 3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

## 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 Safety Data Sheet.

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

#### 8.2.2. Personal protective equipment (PPE)

##### Eye/face protection

The following eye protection(s) are recommended: Safety glasses with side shields.

##### Skin/hand protection

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.

##### 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
Appearance/Odour	Slight aromatic odour, yellow, transparent paste
Odour threshold	<i>No data available.</i>
pH	<i>Not applicable.</i>
Boiling point/boiling range	<i>No data available.</i>
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	No flash point
Autoignition temperature	<i>No data available.</i>
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	<i>No data available.</i>
Relative density	> 1 [Ref Std: WATER=1]
Water solubility	Nil
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>Not applicable.</i>
Evaporation rate	<i>Not applicable.</i>
Vapour density	<i>No data available.</i>



## 3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE

**Decomposition temperature** *No data available.*  
**Viscosity** > 10 Pa-s

### 9.2. Other information

**Volatile organic compounds (VOC)** *No data available.*  
**Percent volatile** *No data available.*  
**VOC less H<sub>2</sub>O & 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 polymerisation 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>
None known.	

## 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 labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 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.

#### Skin contact

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

**3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE****Eye contact**

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

**Ingestion**

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

**Toxicological Data****Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		Data not available or insufficient for classification; calculated ATE >5,000 mg/kg
Rosin, reaction products with acrylic acid	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Nonanoic Acid	Dermal		estimated to be > 5,000 mg/kg
Nonanoic Acid	Inhalation-Dust/Mist		estimated to be > 12.5 mg/l
Nonanoic Acid	Inhalation-Vapor		estimated to be > 50 mg/l
Nonanoic Acid	Ingestion		estimated to be > 5,000 mg/kg
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	Rat	LD50 > 5,110 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Overall product		Minimal irritation
Rosin, reaction products with acrylic acid		Data not available or insufficient for classification
Nonanoic Acid		Data not available or insufficient for classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Overall product		Moderate irritant
Rosin, reaction products with acrylic acid		Data not available or insufficient for classification
Nonanoic Acid		Data not available or insufficient for classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Rabbit	No significant irritation

**Skin Sensitisation**

Name	Species	Value
Rosin, reaction products with acrylic acid		Data not available or insufficient for classification
Nonanoic Acid		Data not available or insufficient for classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Human and animal	Not sensitizing

**3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE****Respiratory Sensitisation**

Name	Species	Value
Rosin, reaction products with acrylic acid		Data not available or insufficient for classification
Nonanoic Acid		Data not available or insufficient for classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica		Data not available or insufficient for classification

**Germ Cell Mutagenicity**

Name	Route	Value
Rosin, reaction products with acrylic acid		Data not available or insufficient for classification
Nonanoic Acid		Data not available or insufficient for classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
Rosin, reaction products with acrylic acid			Data not available or insufficient for classification
Nonanoic Acid			Data not available or insufficient for classification
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Not specified.	Mouse	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
Rosin, reaction products with acrylic acid		Data not available or insufficient for classification			
Nonanoic Acid		Data not available or insufficient for classification			
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Overall	Inhalation	respiratory	Some positive		PJ	

**3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE**

product		irritation	data exist, but the data are not sufficient for classification			
Rosin, reaction products with acrylic acid			Data not available or insufficient for classification			
Nonanoic Acid			Data not available or insufficient for classification			
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica			Data not available or insufficient for classification			

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Rosin, reaction products with acrylic acid			Data not available or insufficient for classification			
Nonanoic Acid			Data not available or insufficient for classification			
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

Name	Value
Rosin, reaction products with acrylic acid	Not an aspiration hazard
Nonanoic Acid	Not an aspiration hazard
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	Not an 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**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

**12.1. Toxicity**

No product test data available.

**3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE**

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Nonanoic Acid	112-05-0	Rainbow trout	Experimental	96 hours	LC50	91 mg/l
Nonanoic Acid	112-05-0	Water flea	Experimental	48 hours	EC50	96 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Algae	Estimated	72 hours	EC50	>100 mg/l
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6		Modeled - using QSAR		NOEC	>100 mg/l
Rosin, reaction products with acrylic acid	83137-13-7		Data not available or insufficient for classification			

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Nonanoic Acid	112-05-0	Estimated Photolysis		Photolytic half-life (in air)	3.1 days (t 1/2)	Other methods
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Nonanoic Acid	112-05-0	Experimental Biodegradation	29 days	CO2 evolution	72 % weight	OECD 301B - Modified sturm or CO2
Rosin, reaction products with acrylic acid	83137-13-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**12.3 : Bioaccumulative potential**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Rosin, reaction products with acrylic acid	83137-13-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with	68909-20-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

## 3M ESPE™ RELYX™ TEMP NE NP CATALYST PASTE

silica						
Nonanoic Acid	112-05-0	Experimental Bioconcentration		Log Kow	3.43	Other methods

### 12.4. Mobility in soil

Please contact manufacturer for more details

### 12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

### 12.6. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

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

This product has been classified as a non-hazardous waste. Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

### EU waste code (product as sold)

180106\* Chemicals consisting of or containing dangerous substances.

## SECTION 14: Transportation information

ADR: Not restricted for transport.

IATA: Not restricted for transport.

IMDG: Not restricted for transport.

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

### 15.2. Chemical Safety Assessment

Not applicable

## SECTION 16: Other information

**List of relevant H statements**

H314 Causes severe skin burns and eye damage.

**List of relevant R-phrases**

R34 Causes burns.

R52 Harmful to aquatic organisms.

**Revision information:**

No revision information is available.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

**3M United Kingdom MSDSs are available at [www.3M.com/uk](http://www.3M.com/uk)**