

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

075037312

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

079376300

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

075032602 075032628 075032982 273011066 273013097



## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

2721 3M™ ESPE™ RELYX™ CERAMIC PRIMER

#### Product Identification Numbers

70-2010-1748-3, 70-2010-2492-7

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

##### Recommended use

Dental Product, Primer

##### Restrictions on use

For use only by dental professionals

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Oral Care Solutions Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	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

Flammable Liquid: Category 2.

Serious Eye Damage/Irritation: Category 2B.

Specific Target Organ Toxicity (central nervous system): Category 3.

Specific Target Organ Toxicity (repeated exposure): Category 2.

#### 2.2. Label elements

##### Signal word

Danger

**Symbols**

Flame | Exclamation mark | Health Hazard |

**Pictograms****Hazard Statements**

Highly flammable liquid and vapor.

Causes eye irritation.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure:  
respiratory system |**Precautionary Statements****Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Take precautionary measures against static discharge.

Keep container tightly closed.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only in a well-ventilated area.

Wear protective gloves and eye/face protection.

Wash thoroughly after handling.

**Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

Get medical advice/attention if you feel unwell.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

**Storage:**

Store in a well-ventilated place. Keep cool.

Keep container tightly closed.

**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
ETHYL ALCOHOL	64-17-5	70 - 80 Trade Secret *

WATER	7732-18-5	20 - 30 Trade Secret *
METHACRYLOXYPROPYLTRIMETHOXY-SILANE	2530-85-0	< 2 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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

#### Hazardous Decomposition or By-Products

##### Substance

Carbon monoxide  
Carbon dioxide

##### Condition

During Combustion  
During Combustion

### 5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

## SECTION 6: Accidental release measures

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

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ventilate the area with fresh air. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. 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

Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry.

Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with water. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

## 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidizing agents.

# 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
ETHYL ALCOHOL	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
ETHYL ALCOHOL	64-17-5	OSHA	TWA:1900 mg/m3(1000 ppm)	

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**

Respiratory protection is not required.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

<b>General Physical Form:</b>	Liquid
<b>Specific Physical Form:</b>	Liquid
<b>Odor, Color, Grade:</b>	Characteristic odor, Clear
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	180 °F
<b>Flash Point</b>	70 °F [Test Method: Closed Cup]
<b>Evaporation rate</b>	<i>No Data Available</i>
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	3.3 % [Details: for Ethanol]
<b>Flammable Limits(UEL)</b>	19 % [Details: for Ethanol]
<b>Vapor Pressure</b>	55 mmHg [ @ 25 °C]
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	0.86 g/ml
<b>Specific Gravity</b>	0.86 [Ref Std: WATER=1]
<b>Solubility in Water</b>	Complete
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>Not Applicable</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	1.1 centipoise
<b>Molecular weight</b>	<i>No Data Available</i>
<b>Percent volatile</b>	<i>No Data Available</i>

## 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

Sparks and/or flames

**10.5. Incompatible materials**

None known.

#### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

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

The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### Inhalation:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

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

May cause additional health effects (see below).

##### Skin Contact:

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

##### 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 diarrhea.

May cause additional health effects (see below).

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

##### Prolonged or repeated exposure may cause target organ effects:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate,

bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

#### Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

#### 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
ETHYL ALCOHOL	Dermal	Rabbit	LD50 > 15,800 mg/kg
ETHYL ALCOHOL	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
ETHYL ALCOHOL	Ingestion	Rat	LD50 17,800 mg/kg
METHACRYLOXYPROPYLTRIMETHOXYSILANE	Dermal	Rabbit	LD50 > 20,900 mg/kg
METHACRYLOXYPROPYLTRIMETHOXYSILANE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.28 mg/l
METHACRYLOXYPROPYLTRIMETHOXYSILANE	Ingestion	Rat	LD50 > 5,225 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
ETHYL ALCOHOL	Rabbit	No significant irritation
METHACRYLOXYPROPYLTRIMETHOXYSILANE	Rabbit	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
ETHYL ALCOHOL	Rabbit	Moderate irritant
METHACRYLOXYPROPYLTRIMETHOXYSILANE	Rabbit	Mild irritant

#### Skin Sensitization

Name	Species	Value
ETHYL ALCOHOL	Human	Some positive data exist, but the data are not sufficient for classification
METHACRYLOXYPROPYLTRIMETHOXYSILANE	Guinea pig	Not sensitizing

#### 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
ETHYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
ETHYL ALCOHOL	In vivo	Some positive data exist, but the data are not sufficient for classification
METHACRYLOXYPROPYLTRIMETHOXYSILANE	In Vitro	Not mutagenic
METHACRYLOXYPROPYLTRIMETHOXYSILANE	In vivo	Not mutagenic

#### Carcinogenicity



Name	Route	Species	Value
ETHYL ALCOHOL	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
ETHYL ALCOHOL	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
ETHYL ALCOHOL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	premating & during gestation
METHACRYLOXYPROPYLTRIMETHOXY SILANE	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 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
ETHYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
ETHYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
ETHYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	

### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ETHYL ALCOHOL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
ETHYL ALCOHOL	Inhalation	hematopoietic system   immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
ETHYL ALCOHOL	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days
METHACRYLOXYPROPYLTRIMETHOXY SILANE	Dermal	skin	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 2,100 mg/kg/day	17 days
METHACRYLOXYPROPYLTRIMETHOXY SILANE	Dermal	liver   kidney and/or bladder	All data are negative	Rabbit	NOAEL 2,100 mg/kg/day	17 days
METHACRYLOXYPROPYLTRIMETHOXY SILANE	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 0.05 mg/l	14 weeks
METHACRYLOXYPROPYLTRIMETHOXY SILANE	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.244 mg/l	14 weeks
METHACRYLOXYPROPYLTRIMETHOXY SILANE	Inhalation	hematopoietic system   eyes	All data are negative	Rat	NOAEL 0.244 mg/l	14 weeks

E		kidney and/or bladder				
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**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information****Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations****13.1. Disposal methods**

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

Incinerate in a permitted waste incineration facility.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

**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 - Yes   Pressure Hazard - No   Reactivity Hazard - No   Immediate Hazard - Yes   Delayed Hazard - Yes

**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.

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:** 2 **Instability:** 1 **Special Hazards:** None

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

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