#### 3MTM ESPETM IMPREGUM PENTA SOFT/IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS ADHESIVE 07/12/18



# **Safety Data Sheet**

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16-5656-0 **Version Number:** 9.00 **Document Group: Issue Date:** 02/24/15 07/12/18 **Supercedes Date:** 

### **Product identifier**

3M™ ESPE™ IMPREGUM PENTA SOFT/IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS ADHESIVE

#### ID Number(s):

70-2011-3411-4, 70-2011-3797-6

#### Recommended use

Dental Material, IMPRESSIONS Restrictions on use

For use only by dental professionals

## Supplier's details

**MANUFACTURER:** 3M

**DIVISION:** Oral Care Solutions Division

3M Center, St. Paul, MN 55144-1000, USA **ADDRESS:** 

**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:

16-5565-3, 16-2740-5, 16-2742-1, 35-4551-4, 16-5566-1

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# 3M<sup>TM</sup> ESPE<sup>TM</sup> IMPREGUM PENTA SOFT/IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS ADHESIVE 07/12/18

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Document Group:35-4551-4Version Number:1.05Issue Date:12/28/17Supercedes Date:06/27/16

# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Polyether Adhesive - New Formulation

#### **Product Identification Numbers**

LE-F100-1876-7, 70-2011-4439-4

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

#### Recommended use

Dental Product, Tray Adhesive

#### Restrictions on use

For use only by dental professionals.

## 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

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

Flammable Liquid: Category 2.

Specific Target Organ Toxicity (single exposure): Category 3.

#### 2.2. Label elements

#### Signal word

Danger

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#### **Symbols**

Flame | Exclamation mark |

#### **Pictograms**





#### **Hazard Statements**

Highly flammable liquid and vapor.

May cause drowsiness or dizziness.

## **Precautionary Statements**

#### **Prevention:**

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only in a well-ventilated area.

Wear protective gloves and eye/face protection.

## **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.

Call a POISON CENTER or doctor/physician 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.

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

Ingredient	C.A.S. No.	% by Wt
ETHYL ACETATE	141-78-6	40 - 60 Trade Secret *
HYDROXY-TERMINATED DIMETHYLSILOXANE,	68440-70-0	40 - 60 Trade Secret *
REACTION PRODUCTS WITH		
CHLOROTRIMETHYLSILANE, HYDROCHLORIC		
ACID, ISOPROPYL ALCOHOL, AND SODIUM		
SILICATE		

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

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation

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

## **Skin Contact:**

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

#### **Eve Contact:**

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. Do not induce vomiting. Get immediate 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.

## 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. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. 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

Contain spill. 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 an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. 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.) Do not get in eyes.

## 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. 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 ACETATE	141-78-6	ACGIH	TWA:400 ppm	
ETHYL ACETATE	141-78-6	OSHA	TWA:1400 mg/m3(400 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

None required.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

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3M<sup>TM</sup> Polyether Adhesive - New Formulation 12/28/17

**General Physical Form:**Specific Physical Form:
Viscous

**Odor, Color, Grade:** Red liquid with characteristic organic solvent odor.

Odor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data Available

**Boiling Point** 169 °F

Flash Point 25 °F [Test Method: Closed Cup]

Evaporation rate

No Data Available
Flammability (solid, gas)

Flammable Limits(LEL)

1.2 %

Flammable Limits(UEL)

Vapor Pressure

11.5 %

131 mmHg

Vapor Density> 1 [Ref Std: AIR=1]DensityApproximately 0.9 g/cm3Specific Gravity> 0.9 [Ref Std: WATER=1]

Solubility in Water Ni

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data AvailableViscosityApproximately 0.25 Pa-sPercent volatileNo 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

Sparks and/or flames

Heat

# 10.5. Incompatible materials

Strong acids

Strong oxidizing agents

No Data Available

## 10.6. Hazardous decomposition products

**Substance Condition** 

Carbon monoxide Oxidation, heat or reaction Carbon dioxide Oxidation, heat or reaction

# **SECTION 11: Toxicological information**

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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.

## 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.

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:

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.

May cause additional health effects (see below).

#### **Additional Health Effects:**

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

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

#### **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**

Treater Tonierty			
Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
ETHYL ACETATE	Dermal	Rabbit	LD50 > 18,000 mg/kg
ETHYL ACETATE	Inhalation-	Rat	LC50 70.5 mg/l
	Vapor (4		
	hours)		
ETHYL ACETATE	Ingestion	Rat	LD50 5,620 mg/kg

ATE = acute toxicity estimate

#### **Skin Corrosion/Irritation**

Name	Species	Value

|--|

ETHYL ACETATE	Rabbit	Minimal irritation
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Serious Eye Damage/Irritation

Name	Species	Value
ETHYL ACETATE	Rabbit	Mild irritant

#### **Skin Sensitization**

Name	Species	Value
ETHYL ACETATE	Guinea	Not classified
	pig	

## **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

Name	Route	Value
ETHYL ACETATE	In Vitro	Not mutagenic
ETHYL ACETATE	In vivo	Not mutagenic

## Carcinogenicity

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

## Reproductive Toxicity

## Reproductive and/or Developmental Effects

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

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ETHYL ACETATE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
ETHYL ACETATE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
ETHYL ACETATE	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ETHYL ACETATE	Inhalation	endocrine system   liver   nervous system	Not classified	Rat	NOAEL 0.043 mg/l	90 days
ETHYL ACETATE	Inhalation	hematopoietic system	Not classified	Rabbit	LOAEL 16 mg/l	40 days
ETHYL ACETATE	Ingestion	hematopoietic system   liver   kidney and/or bladder	Not classified	Rat	NOAEL 3,600 mg/kg/day	90 days

## **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.

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# **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.

## **EPCRA 311/312 Hazard Classifications:**

## Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

#### **Health Hazards**

Specific target organ toxicity (single or repeated exposure)

## 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

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3M<sup>TM</sup> Polyether Adhesive - New Formulation 12/28/17

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: 1 Flammability: 3 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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 16-5565-3
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 11/02/16
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 02/25/16

# **SECTION 1: Identification**

#### 1.1. Product identifier

IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE Paste

#### **Product Identification Numbers**

LE-FSFD-3061-2

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

#### Recommended use

Dental Product, Impression material

#### Restrictions on use

For use only by dental professionals

## 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

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 1A.

## 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
ETHYLENE OXIDE TETRAMETHYLENE OXIDE	110531-92-5	70 - 90 Trade Secret *
COPOLYMER		
DIATOMACEOUS EARTH	68855-54-9	1 - 10 Trade Secret *
DIBENZYL TOLUENE	26898-17-9	1 - 10 Trade Secret *
FATTY ACIDS TRIGLYCERIDES	67701-27-3	1 - 10 Trade Secret *
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 10 Trade Secret *
ACETYL TRIBUTYL CITRATE	77-90-7	1 - 5 Trade Secret *
C.I. PIGMENT WHITE 5	1345-05-7	1 - 5 Trade Secret *
CRISTOBALITE	14464-46-1	1 - 5 Trade Secret *
1-DODECYLIMIDAZOLE	4303-67-7	< 1
Mentha arvensis, ext.	90063-97-1	< 0.5 Trade Secret *

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

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation:

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

#### **Skin Contact:**

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

#### **Eye Contact:**

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

#### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

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

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

None inherent in this product.

#### **Hazardous Decomposition or By-Products**

Substance
Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

## **Condition**

During Combustion During Combustion During Combustion

## 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

# **SECTION 6: Accidental release measures**

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

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

## 6.2. Environmental precautions

Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes. 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

Store away from heat. Store away from acids. Store away from strong bases. 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	<b>Additional Comments</b>
BARIUM, SOLUBLE COMPOUNDS	1345-05-7	OSHA	TWA(as Ba):0.5 mg/m3	
BARIUM, SOLUBLE COMPOUNDS	1345-05-7	ACGIH	TWA(as Ba):0.5 mg/m3	A4: Not class. as human carcin
CRISTOBALITE	14464-46-1	OSHA	TWA concentration(respirable):0.05 mg/m3(1.2 millions of particles/cu. ft.);TWA:0.05 mg/m3	
CRISTOBALITE	14464-46-1	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
SILICA, AMORPHOUS	68855-54-9	OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

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

CEIL: Ceiling

#### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use in a well-ventilated area.

## 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

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

## Skin/hand protection

See Section 7.1 for additional information on skin protection.

## Respiratory protection

None required.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

**General Physical Form:**Specific Physical Form:
Paste

Odor, Color, Grade: characteristic odor, Orange colored pastes

Odor threshold No Data Available pН Not Applicable **Melting point** Not Applicable **Boiling Point** Not Applicable **Flash Point** No flash point **Evaporation rate** Not Applicable Flammability (solid, gas) Not Classified Not Applicable Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) **Vapor Pressure** No Data Available **Vapor Density** Not Applicable **Density** 1 g/cm3 - 1.2 g/cm3

Specific Gravity 1 - 1.2 [Ref Std: WATER=1]

Solubility in Water Negligible No Data Available Solubility- non-water Partition coefficient: n-octanol/ water No Data Available Not Applicable **Autoignition temperature** No Data Available **Decomposition temperature** No Data Available Viscosity Molecular weight 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 may be reactive with certain agents under certain conditions - see the remaining headings in this section.

#### 10.2. Chemical stability

Stable.

## 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

## 10.4. Conditions to avoid

Heat

## 10.5. Incompatible materials

Strong acids Strong bases

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Strong oxidizing agents

## 10.6. Hazardous decomposition products

**Substance** 

**Condition** 

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:

This product may have a characteristic odor; however, no adverse health effects are anticipated.

## **Skin Contact:**

May be harmful in contact with skin.

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.

## **Additional Health Effects:**

## Carcinogenicity:

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

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
SILICA, CRYS AIRRESP	14464-46-1	Known human carcinogen	National Toxicology Program Carcinogens
SILICA, CRYS AIRRESP	68855-54-9	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
SILICA, CRYS AIRRESP	68855-54-9	Known human carcinogen	National Toxicology Program Carcinogens
CRISTOBALITE	14464-46-1	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

\_\_\_\_

# **Toxicological Data**

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

**Acute Toxicity** 

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE 2,000 - 5,000
•			mg/kg
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000
•			mg/kg
ETHYLENE OXIDE TETRAMETHYLENE OXIDE	Dermal	Professio	LD50 Not applicable
COPOLYMER		nal	
		judgeme	
		nt	
ETHYLENE OXIDE TETRAMETHYLENE OXIDE	Ingestion	Rat	LD50 > 2,000 mg/kg
COPOLYMER			
DIBENZYL TOLUENE	Dermal	Rabbit	LD50 > 2,000 mg/kg
DIBENZYL TOLUENE	Ingestion	Rat	LD50 > 10,360 mg/kg
FATTY ACIDS TRIGLYCERIDES	Dermal	Rabbit	LD50 > 2,000 mg/kg
FATTY ACIDS TRIGLYCERIDES	Ingestion	Rat	LD50 > 2,000 mg/kg
CRISTOBALITE	Dermal		LD50 estimated to be > 5,000 mg/kg
CRISTOBALITE	Ingestion		LD50 estimated to be > 5,000 mg/kg
POLYETHYLENE-POLYPROPYLENE GLYCOL	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
TODIETHIELE TODIENCE TEDIE	24111111	nal	2200 commence to oc c,000 mg ng
		judgeme	
		nt	
POLYETHYLENE-POLYPROPYLENE GLYCOL	Ingestion	Rat	LD50 5,700 mg/kg
DIATOMACEOUS EARTH	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
DIATOMACEOUS EARTH	Inhalation-	Rat	LC50 > 2.7 mg/l
	Dust/Mist		
	(4 hours)		
DIATOMACEOUS EARTH	Ingestion	Rat	LD50 > 2,000 mg/kg
C.I. PIGMENT WHITE 5	Ingestion	Rat	LD50 > 15,000 mg/kg
C.I. PIGMENT WHITE 5	Dermal	similar	LD50 > 1,000 mg/kg
		compoun	
CA DAGAGE WANTED A	* 1 1	ds	X 050 - 2.52 - #
C.I. PIGMENT WHITE 5	Inhalation-	similar	LC50 > 2.52 mg/l
	Dust/Mist	compoun	
ACETYL TRIBUTYL CITRATE	(4 hours)	ds Professio	LD50 estimated to be > 5,000 = //
ACEI IL IKIBUI IL CIIKALE	Dermal	nal	LD50 estimated to be > 5,000 mg/kg
		judgeme	
		nt	
ACETYL TRIBUTYL CITRATE	Ingestion	Rat	LD50 > 25,000 mg/kg
1-DODECYLIMIDAZOLE	Ingestion	Rat	LD50 641 mg/kg
Mentha arvensis, ext.	Dermal	Rabbit	LD50 > 5,000 mg/kg
Mentha arvensis, ext.	Ingestion	Rat	LD50 1,240 mg/kg
ivionitia al volisis, ext.	ingestion	IXat	LDJU 1,270 Hg/Kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

SKIII COTTOSIOII/1111tatioii					
Name	Species	Value			
	•				
ETHYLENE OXIDE TETRAMETHYLENE OXIDE COPOLYMER	Rabbit	No significant irritation			
CRISTOBALITE	Professio	No significant irritation			
	nal				
	judgeme				
	nt				
DIATOMACEOUS EARTH	In vitro	No significant irritation			
	data				
1-DODECYLIMIDAZOLE	Rabbit	Mild irritant			
Mentha arvensis, ext.	Rabbit	Mild irritant			

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Serious Eye Damage/Irritation

Name	Species	Value
ETHYLENE OXIDE TETRAMETHYLENE OXIDE COPOLYMER	Rabbit	Moderate irritant
DIATOMACEOUS EARTH	Rabbit	Mild irritant
1-DODECYLIMIDAZOLE	In vitro	Severe irritant
	data	
Mentha arvensis, ext.	In vitro	Severe irritant
	data	

## **Skin Sensitization**

Name	Species	Value
ETHYLENE OXIDE TETRAMETHYLENE OXIDE COPOLYMER	Guinea	Not sensitizing
	pig	
DIATOMACEOUS EARTH	Mouse	Not sensitizing
1-DODECYLIMIDAZOLE	Mouse	Sensitizing
Mentha arvensis, ext.	Guinea	Sensitizing
	pig	

## **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

Name	Route	Value
ETHYLENE OXIDE TETRAMETHYLENE OXIDE COPOLYMER	In Vitro	Not mutagenic
CRISTOBALITE	In Vitro	Some positive data exist, but the data are not sufficient for classification
CRISTOBALITE	In vivo	Some positive data exist, but the data are not sufficient for classification
DIATOMACEOUS EARTH	In Vitro	Some positive data exist, but the data are not sufficient for classification
1-DODECYLIMIDAZOLE	In Vitro	Not mutagenic

Carcinogenicity

<u>enremegemeny</u>			
Name	Route	Species	Value
CRISTOBALITE	Inhalation	Human	Carcinogenic
		and	
		animal	
DIATOMACEOUS EARTH	Inhalation	Human	Carcinogenic
		and	
		animal	

## Reproductive Toxicity

## Reproductive and/or Developmental Effects

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

## Target Organ(s)

## **Specific Target Organ Toxicity - single exposure**

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CRISTOBALITE	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
DIATOMACEOUS EARTH	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

## IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE Paste 11/02/16

DIATOMACEOUS	Ingestion	hematopoietic	All data are negative	Rat	NOAEL	90 days
EARTH		system   eyes	_		3,738	
		kidney and/or			mg/kg/day	
		bladder				

#### **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

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

#### **Chemical fate information**

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

# **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

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

# **SECTION 14: Transport Information**

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

# SECTION 15: Regulatory information

### 15.1. 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

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

Ingredient	C.A.S. No	% by Wt
C.I. PIGMENT WHITE 5 (Barium compounds,	1345-05-7	1 - 5
except barium sulfate)		
C.I. PIGMENT WHITE 5 (ZINC COMPOUNDS)	1345-05-7	1 - 5

## 15.2. State Regulations

\_\_\_\_

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Contact 3M for more information.

#### 15.3. Chemical Inventories

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

Contact 3M for more information.

#### 15.4. International Regulations

Contact 3M for more information.

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

# **SECTION 16: Other information**

#### NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

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

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 16-5565-3
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 02/25/16

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# **Safety Data Sheet**

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 Version Number:
 7.00

 Issue Date:
 07/06/17
 Supercedes Date:
 02/25/16

# **SECTION 1: Identification**

#### 1.1. Product identifier

IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST

#### **Product Identification Numbers**

LE-FSFD-6306-1

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

Recommended use

Dental Product, Impression

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

## 1.4. Emergency telephone number

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

# **SECTION 2: Hazard identification**

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

## 2.1. Hazard classification

Skin Sensitizer: Category 1B.

#### 2.2. Label elements

Signal word

Warning

**Symbols** 

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Exclamation mark |

#### **Pictograms**



#### **Hazard Statements**

May cause an allergic skin reaction.

## **Precautionary Statements**

#### **Prevention:**

Wear protective gloves.

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

#### **Response:**

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

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

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

Ingredient	C.A.S. No.	% by Wt
POLYMERIC ACETATE	91825-26-2	25 - 35 Trade Secret *
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	20 - 30 Trade Secret *
CITRIC ESTER	77-90-7	10 - 20 Trade Secret *
SULFONIUM SALT	72140-65-9	10 - 19 Trade Secret *
DIBENZYL TOLUENE	26898-17-9	1 - 10 Trade Secret *
SILANE TREATEAD SILICA	68909-20-6	1 - 10 Trade Secret *
FATTY ACIDS TRIGLYCERIDES	67701-27-3	1 - 5 Trade Secret *
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5 Trade Secret *

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

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

## Inhalation:

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

## **Skin Contact:**

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

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#### **Eye Contact:**

No need for first aid is anticipated.

#### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

# **SECTION 5: Fire-fighting measures**

# 5.1. Suitable extinguishing media

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

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

None inherent in this product.

#### **Hazardous Decomposition or By-Products**

#### **Substance**

Carbon monoxide Carbon dioxide Irritant Vapors or Gases

#### Condition

During Combustion During Combustion During Combustion

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

No special protective actions for fire-fighters are anticipated.

# **SECTION 6: Accidental release measures**

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

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

## 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

# **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes. 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

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Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

# **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
Cristobalite	68855-54-9	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
SILICA, AMORPHOUS	68855-54-9	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	
Cristobalite	68855-54-9	OSHA	TWA	
			concentration(respirable):0.05	
			mg/m3(1.2 millions of	
			particles/cu. ft.);TWA:0.05	
			mg/m3	
SILICA, AMORPHOUS	68909-20-6	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

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

CEIL: Ceiling

## 8.2. Exposure controls

## 8.2.1. Engineering controls

Use in a well-ventilated area.

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

#### Eye/face protection

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

Safety Glasses with side shields

#### Skin/hand protection

See Section 7.1 for additional information on skin protection.

#### Respiratory protection

None required.

# **SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties General Physical Form:**Solid

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## IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST

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Specific Physical Form: Paste

Odor, Color, Grade: slightly characteristic odor, red colored pastes

Odor thresholdNo Data AvailablepHNot ApplicableMelting pointNo Data AvailableBoiling PointNot Applicable

Flash Point Flash point > 93 °C (200 °F)

Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNo Data AvailableVapor DensityNo Data AvailableDensity1.1 g/cm3 - 1.2 g/cm3

**Specific Gravity** 1.1 - 1.2 [*Ref Std*:WATER=1]

Solubility in Water Negligible Solubility- non-water No Data Available Partition coefficient: n-octanol/ water No Data Available **Autoignition temperature** Not Applicable **Decomposition temperature** No Data Available Viscosity No Data Available Molecular weight No Data Available **Volatile Organic Compounds** Not Applicable Not Applicable Percent volatile Not Applicable **VOC Less H2O & Exempt Solvents** 

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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

## 10.2. Chemical stability

Stable.

## 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Heat

## 10.5. Incompatible materials

Amines Strong acids Strong bases Strong oxidizing agents

#### 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**

07/06/17

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.

#### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

#### Inhalation:

This product may have a characteristic odor; however, no adverse health effects are anticipated.

#### **Skin Contact:**

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

#### **Eve Contact:**

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

## **Ingestion:**

May be harmful if swallowed.

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

## **Additional Health Effects:**

## Carcinogenicity:

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

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	CAS No.	Class Description	Regulation
SILICA, CRYS AIRRESP	68855-54-9	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
SILICA, CRYS AIRRESP	68855-54-9	Known human carcinogen	National Toxicology Program Carcinogens
Generic: Cristobalite	68855-54-9	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

## **Toxicological Data**

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

## **Acute Toxicity**

Acute Toxicity			
Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
POLYMERIC ACETATE	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
POLYMERIC ACETATE	Ingestion	Rat	LD50 > 2,000 mg/kg
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	

**Page** 6 **of** 10

17.			

	ı	1	
		judgeme	
		nt	
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation-	Rat	LC50 > 2.7  mg/l
	Dust/Mist		
	(4 hours)		
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	Rat	LD50 > 2,000 mg/kg
CITRIC ESTER	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
CITRIC ESTER	Ingestion	Rat	LD50 > 25,000 mg/kg
SULFONIUM SALT	Dermal	Rat	LD50 > 2,000 mg/kg
SULFONIUM SALT	Ingestion	Rat	LD50 300-2000 mg/kg
DIBENZYL TOLUENE	Dermal	Rabbit	LD50 > 2,000 mg/kg
DIBENZYL TOLUENE	Ingestion	Rat	LD50 > 10,360 mg/kg
SILANE TREATEAD SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATEAD SILICA	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		-
	(4 hours)		
SILANE TREATEAD SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
POLYETHYLENE-POLYPROPYLENE GLYCOL	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
POLYETHYLENE-POLYPROPYLENE GLYCOL	Ingestion	Rat	LD50 5,700 mg/kg
FATTY ACIDS TRIGLYCERIDES	Dermal	Rabbit	LD50 > 2,000 mg/kg
FATTY ACIDS TRIGLYCERIDES	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name	Species	Value
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In vitro data	No significant irritation
SULFONIUM SALT	Rabbit	Mild irritant
SILANE TREATEAD SILICA	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Rabbit	Mild irritant
SULFONIUM SALT	Rabbit	No significant irritation
SILANE TREATEAD SILICA	Rabbit	No significant irritation

## **Skin Sensitization**

Name	Species	Value
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Mouse	Not classified
SULFONIUM SALT	Mouse	Sensitizing
SILANE TREATEAD SILICA	Human	Not classified
	and	
	animal	

# **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
POLYMERIC ACETATE	In Vitro	Not mutagenic
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In Vitro	Some positive data exist, but the data are not sufficient for classification
SULFONIUM SALT	In Vitro	Not mutagenic
SILANE TREATEAD SILICA	In Vitro	Not mutagenic

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Carcinogenicity

Name	Route	Species	Value
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	Human	Carcinogenic
		and	
		animal	
SILANE TREATEAD SILICA	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification

## Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
SILANE TREATEAD SILICA	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATEAD SILICA	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATEAD SILICA	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s

## Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
SULFONIUM SALT	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	LOAEL 2,000 mg/kg	
SULFONIUM SALT	Ingestion	respiratory system	Not classified	Rat	NOAEL 300 mg/kg	

Specific Target Organ Toxicity - repeated exposure

specific ranger organ romenty - repeated exposure								
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration		
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure		
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	hematopoietic system   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 3,738 mg/kg/day	90 days		
SILANE TREATEAD SILICA	Inhalation	respiratory system   silicosis	Not classified	Human	NOAEL Not available	occupational exposure		

#### **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

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

## **Chemical fate information**

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

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# **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

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

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

#### EPCRA 311/312 Hazard Classifications (effective January 1, 2018):

## Physical Hazards

Not applicable

#### **Health Hazards**

Respiratory or Skin Sensitization

#### 15.2. State Regulations

Contact 3M for more information.

#### 15.3. Chemical Inventories

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

Contact 3M for more information.

#### 15.4. International Regulations

Contact 3M for more information.

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

## **SECTION 16: Other information**

## NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

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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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# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> ESPE<sup>TM</sup> Impregum<sup>TM</sup> Penta<sup>TM</sup> Soft Base Paste

#### **Product Identification Numbers**

LE-FSFD-3173-1, 41-8650-1192-2 4010029023

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

#### Recommended use

Dental Product, Impression material

#### **Restrictions on use**

For use only by dental professionals

## 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

## 1.4. Emergency telephone number

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

# **SECTION 2: Hazard identification**

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

#### 2.1. Hazard classification

Skin Sensitizer: Category 1A.

## 2.2. Label elements

## Signal word

Warning

#### **Symbols**

Exclamation mark |

#### **Pictograms**



#### **Hazard Statements**

May cause an allergic skin reaction.

## **Precautionary Statements**

#### **Prevention:**

Wear protective gloves.

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

#### **Response:**

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

#### Disposal:

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

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

Ingredient	C.A.S. No.	% by Wt
Polyether	110531-92-5	40 - 60 Trade Secret *
FATTY ACID TRIGLYCERIDES	67701-27-3	10 - 30 Trade Secret *
POLYMERIC ACETATE	91825-26-2	1 - 20 Trade Secret *
DIBENZYL TOLUENE	26898-17-9	1 - 10 Trade Secret *
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	1 - 10 Trade Secret *
1-DODECYLIMIDAZOLE	4303-67-7	< 1 Trade Secret *
Oils, mint, Mentha arvensis piperascenssis, var.	68917-18-0	< 0.5 Trade Secret *
piperascens, Labiatae.		

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

# **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

## Inhalation:

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

## **Skin Contact:**

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

#### **Eye Contact:**

No need for first aid is anticipated.

#### 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

## 5.3. Special protective actions for fire-fighters

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

**Condition** 

During Combustion
During Combustion

**During Combustion** 

# **SECTION 6: Accidental release measures**

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

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

## 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

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

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes. 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.

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3M<sup>TM</sup> ESPE<sup>TM</sup> Impregum<sup>TM</sup> Penta<sup>TM</sup> Soft Base Paste 07/29/19

## 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases. 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	<b>Additional Comments</b>
Cristobalite	68855-54-9	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Cristobalite	68855-54-9	OSHA	TWA concentration(respirable):0.05 mg/m3(1.2 millions of particles/cu. ft.);TWA:0.05 mg/m3	
SILICA, AMORPHOUS	68855-54-9	OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

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

CEIL: Ceiling

## 8.2. Exposure controls

## 8.2.1. Engineering controls

Use in a well-ventilated area.

## 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

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

Safety Glasses with side shields

#### Skin/hand protection

See Section 7.1 for additional information on skin protection.

#### Respiratory protection

None required.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

**Appearance** 

Physical state Solid
Color Multicolor

\_\_\_\_\_

3M<sup>TM</sup> ESPE<sup>TM</sup> Impregum<sup>TM</sup> Penta<sup>TM</sup> Soft Base Paste 07/29/19

Specific Physical Form: Paste

**Odor** Minty

Odor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data AvailableBoiling PointNot Applicable

Flash Point Flash point > 93 °C (200 °F)

Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot ApplicableVapor DensityNot ApplicableDensityNo Data Available

Specific Gravity 1.0 - 1.2 [Ref Std: WATER=1]

Solubility in Water Nil

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water No Data Available No Data Available **Autoignition temperature Decomposition temperature** No Data Available Viscosity No Data Available **Volatile Organic Compounds** *Not Applicable* Percent volatile Not Applicable **VOC Less H2O & Exempt Solvents** Not Applicable

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

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

### 10.2. Chemical stability

Stable.

# 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

## 10.4. Conditions to avoid

Heat

## 10.5. Incompatible materials

Strong acids
Strong bases

Strong oxidizing agents

#### 10.6. Hazardous decomposition products

**Substance** Condition

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:

This product may have a characteristic odor; however, no adverse health effects are anticipated.

#### Skin Contact

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

#### **Eye Contact:**

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

#### Ingestion

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

#### **Additional Health Effects:**

## Carcinogenicity:

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

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
SILICA, CRYS AIRRESP	68855-54-9	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
SILICA, CRYS AIRRESP	68855-54-9	Known human carcinogen	National Toxicology Program Carcinogens
Generic: Cristobalite	68855-54-9	Grn 1: Carcinogenic to humans	International Agency for Research on Cancer

#### **Toxicological Data**

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

# **Acute Toxicity**

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Polyether	Dermal	Professio nal judgeme nt	LD50 Not applicable
Polyether	Ingestion	Rat	LD50 > 2,000 mg/kg
FATTY ACID TRIGLYCERIDES	Dermal	Rabbit	LD50 > 2,000 mg/kg
FATTY ACID TRIGLYCERIDES	Ingestion	Rat	LD50 > 2,000 mg/kg
POLYMERIC ACETATE	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg

		nal	
		judgeme	
		nt	
POLYMERIC ACETATE	Ingestion	Rat	LD50 > 2,000 mg/kg
DIBENZYL TOLUENE	Dermal	Rabbit	LD50 > 2,000 mg/kg
DIBENZYL TOLUENE	Ingestion	Rat	LD50 > 10,360 mg/kg
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation-	Rat	LC50 > 2.7  mg/l
	Dust/Mist		
	(4 hours)		
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	Rat	LD50 > 2,000  mg/kg
1-DODECYLIMIDAZOLE	Ingestion	Rat	LD50 641 mg/kg
Oils, mint, Mentha arvensis piperascenssis, var. piperascens,	Dermal	Rabbit	LD50 > 5,000  mg/kg
Labiatae.			
Oils, mint, Mentha arvensis piperascenssis, var. piperascens,	Ingestion	Rat	LD50 1,240 mg/kg
Labiatae.			

ATE = acute toxicity estimate

# Skin Corrosion/Irritation

Name	Species	Value
Polyether	Rabbit	No significant irritation
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In vitro	No significant irritation
	data	
1-DODECYLIMIDAZOLE	Rabbit	Mild irritant
Oils, mint, Mentha arvensis piperascenssis, var. piperascens, Labiatae.	Rabbit	Mild irritant

**Serious Eve Damage/Irritation** 

Serious Eye Damage/II Hatton	1 ~ .	Lyry
Name	Species	Value
Overall product	In vitro	No significant irritation
	data	
Polyether	Rabbit	Moderate irritant
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Rabbit	Mild irritant
1-DODECYLIMIDAZOLE	In vitro	Severe irritant
	data	
Oils, mint, Mentha arvensis piperascenssis, var. piperascens, Labiatae.	In vitro	Severe irritant
	data	

# **Skin Sensitization**

Name	Species	Value
Polyether	Guinea	Not classified
	pig	
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Mouse	Not classified
1-DODECYLIMIDAZOLE	Mouse	Sensitizing
Oils, mint, Mentha arvensis piperascenssis, var. piperascens, Labiatae.	Guinea	Sensitizing
	pig	

# **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

Name	Route	Value
Polyether	In Vitro	Not mutagenic
POLYMERIC ACETATE	In Vitro	Not mutagenic
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In Vitro	Some positive data exist, but the data are not sufficient for classification
1-DODECYLIMIDAZOLE	In Vitro	Not mutagenic

3M <sup>TM</sup> ESPE <sup>TM</sup> Impregum <sup>TM</sup> Penta <sup>TM</sup> Soft Base Paste 07/29/19	
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### Carcinogenicity

Name	Route	Species	Value
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	Human	Carcinogenic
		and	
		animal	

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

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

### Target Organ(s)

#### **Specific Target Organ Toxicity - single exposure**

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

**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	hematopoietic system   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 3,738 mg/kg/day	90 days

#### **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

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

## **Chemical fate information**

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

# **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

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

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

EPA Hazardous Waste Number (RCRA): D005 (Barium)

# **SECTION 14: Transport Information**

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3M<sup>TM</sup> ESPE<sup>TM</sup> Impregum<sup>TM</sup> Penta<sup>TM</sup> Soft Base Paste 07/29/19

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.

## **EPCRA 311/312 Hazard Classifications:**

Physical Hazards

Not applicable

#### **Health Hazards**

Respiratory or Skin Sensitization

## 15.2. State Regulations

Contact 3M for more information.

#### 15.3. Chemical Inventories

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

Contact 3M for more information.

# 15.4. International Regulations

Contact 3M for more information.

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

# **SECTION 16: Other information**

#### NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

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

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# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Impregum<sup>TM</sup> Penta<sup>TM</sup> Soft Catalyst

#### **Product Identification Numbers**

CA-ESPE-3173-1, LE-FSFD-3173-8, 41-8650-1184-9 4010029020

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

#### Recommended use

Dental Product, Impression Material

#### **Restrictions on use**

For use only by dental professionals in approved indications.

### 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Oral Care Solutions Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

### 1.4. Emergency telephone number

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

# **SECTION 2: Hazard identification**

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

#### 2.1. Hazard classification

Skin Sensitizer: Category 1B.
Reproductive Toxicity: Category 2.

Specific Target Organ Toxicity (repeated exposure): Category 1.

## 2.2. Label elements

Signal word

#### Danger

## **Symbols**

Exclamation mark | Health Hazard |

## **Pictograms**



#### **Hazard Statements**

May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.

Causes damage to organs through prolonged or repeated ingestion exposure:

blood or blood-forming organs

May cause damage to organs through prolonged or repeated ingestion exposure:

respiratory system | sensory organs |

## **Precautionary Statements**

## **Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

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

#### Response:

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

#### Disposal:

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

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

Ingredient	C.A.S. No.	% by Wt
CITRIC ESTER	77-90-7	30 - 50 Trade Secret *
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	68855-54-9	10 - 30 Trade Secret *
SILANE TREATED SILICA	68909-20-6	10 - 30 Trade Secret *
SULFONIUM SALT	72140-65-9	10 - 30 Trade Secret *
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 10 Trade Secret *

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

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# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation:

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

#### **Skin Contact:**

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

#### **Eve Contact:**

No need for first aid is anticipated.

#### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

# **SECTION 5: Fire-fighting measures**

## 5.1. Suitable extinguishing media

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

# 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

# **Hazardous Decomposition or By-Products**

Substance
Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

# Condition

During Combustion
During Combustion
During Combustion

## 5.3. Special protective actions for fire-fighters

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

# **SECTION 6: Accidental release measures**

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

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

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate

authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. 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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes. Use personal protective equipment (gloves, respirators, etc.) as required. 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

Store away from heat. Store away from acids. Store away from strong bases. 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	<b>Additional Comments</b>
Cristobalite	68855-54-9	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Cristobalite	68855-54-9	OSHA	TWA	
			concentration(respirable):0.05	
			mg/m3(1.2 millions of	
			particles/cu. ft.);TWA:0.05	
			mg/m3	
SILICA, AMORPHOUS	68855-54-9	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	
SILICA, AMORPHOUS	68909-20-6	OSHA	TWA concentration:0.8	
			mg/m3;TWA:20 millions of	
			particles/cu. ft.	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

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

CEIL: Ceiling

## 8.2. Exposure controls

## 8.2.1. Engineering controls

Use in a well-ventilated area.

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

## Eye/face protection

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

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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: Dark red color, slightly acrid odor

Odor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data AvailableBoiling PointNot Applicable

Flash Point Flash point > 93 °C (200 °F)

Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot ApplicableVapor DensityNot ApplicableDensityNo Data Available

Specific Gravity 1.1 - 1.4 [Ref Std: WATER=1]

Solubility in Water Negligible No Data Available Solubility- non-water 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** Not Applicable Percent volatile Not Applicable **VOC Less H2O & Exempt Solvents** Not Applicable

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

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

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Heat

### 10.5. Incompatible materials

Strong acids Strong bases Strong oxidizing agents

#### 10.6. Hazardous decomposition products

#### **Substance**

Condition

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:**

This product may have a characteristic odor; however, no adverse health effects are anticipated.

#### **Skin Contact:**

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

## **Eye Contact:**

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

#### **Ingestion:**

May be harmful if swallowed.

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

May cause additional health effects (see below).

#### **Additional Health Effects:**

# Prolonged or repeated exposure may cause target organ effects:

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Bone Marrow Effects: Signs/symptoms may include generalized weakness, pallor of the skin, fatty infiltration of the bone marrow, decreases in the numbers of circulating blood cells, increased susceptibility to infection.

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.

### **Reproductive/Developmental Toxicity:**

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

## Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use: Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
SILICA, CRYS AIRRESP	68855-54-9	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
SILICA, CRYS AIRRESP	68855-54-9	Known human carcinogen	National Toxicology Program Carcinogens
Generic: Cristobalite	68855-54-9	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

## **Toxicological Data**

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

#### **Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
CITRIC ESTER	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
CITRIC ESTER	Ingestion	Rat	LD50 > 25,000 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
SILANE TREATED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
SULFONIUM SALT	Dermal	Rat	LD50 > 2,000 mg/kg
SULFONIUM SALT	Ingestion	Rat	LD50 300-2,000 mg/kg
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.7 mg/l
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	Rat	LD50 > 2,000 mg/kg
POLYETHYLENE-POLYPROPYLENE GLYCOL	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
POLYETHYLENE-POLYPROPYLENE GLYCOL	Ingestion	Rat	LD50 5,700 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name		Value
SILANE TREATED SILICA	Rabbit	No significant irritation
SULFONIUM SALT	Rabbit	Mild irritant
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In vitro	No significant irritation
	data	

Serious Eye Damage/Irritation

Name	Species	Value
SILANE TREATED SILICA	Rabbit	No significant irritation
SULFONIUM SALT	Rabbit	Mild irritant

	3МТМ	Imnregum <sup>TM</sup>	PentaTM	Soft Catalyst	
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Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Rabbit	Mild irritant
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# **Skin Sensitization**

Name	Species	Value
SILANE TREATED SILICA	Human	Not classified
	and	
	animal	
SULFONIUM SALT	Mouse	Sensitizing
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Mouse	Not classified

# **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
SILANE TREATED SILICA	In Vitro	Not mutagenic
SULFONIUM SALT	In Vitro	Not mutagenic
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
SILANE TREATED SILICA	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	Human	Carcinogenic
		and	_
		animal	

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
SILANE TREATED SILICA	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s
SULFONIUM SALT	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	premating into lactation
SULFONIUM SALT	Ingestion	Toxic to female reproduction	Rat	NOAEL 30 mg/kg/day	premating into lactation
SULFONIUM SALT	Ingestion	Toxic to male reproduction	Rat	NOAEL 30 mg/kg/day	30 days

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

peeme Target Organ Toxicity - single exposure							
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration	
SULFONIUM SALT	Ingestion	respiratory system	Not classified	Rat	NOAEL 300 mg/kg		

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
SILANE TREATED	Inhalation	respiratory system	Not classified	Human	NOAEL Not	occupational
SILICA		silicosis			available	exposure
SULFONIUM SALT	Ingestion	bone marrow	Causes damage to organs through	Rat	NOAEL 10	30 days

			prolonged or repeated exposure		mg/kg/day	
SULFONIUM SALT	Ingestion	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 30 mg/kg/day	30 days
SULFONIUM SALT	Ingestion	eyes	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 100 mg/kg/day	30 days
SULFONIUM SALT	Ingestion	hematopoietic system   liver   immune system   kidney and/or bladder	Not classified	Rat	NOAEL 300 mg/kg/day	30 days
SULFONIUM SALT	Ingestion	gastrointestinal tract	Not classified	Rat	NOAEL 30 mg/kg/day	30 days
SULFONIUM SALT	Ingestion	auditory system   heart   skin   endocrine system   bone, teeth, nails, and/or hair   muscles   nervous system   vascular system	Not classified	Rat	NOAEL 300 mg/kg/day	30 days
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Flux calcined diatomaceous earth (cristobalite 1 - <10%)	Ingestion	hematopoietic system   eyes   kidney and/or bladder	Not classified	Rat	NOAEL 3,738 mg/kg/day	90 days

## **Aspiration Hazard**

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

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

# **SECTION 12: Ecological information**

### **Ecotoxicological information**

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

### **Chemical fate information**

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

# **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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.

## 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.

# **EPCRA 311/312 Hazard Classifications:**

#### Physical Hazards

Not applicable

#### **Health Hazards**

Reproductive toxicity

Respiratory or Skin Sensitization

Specific target organ toxicity (single or repeated exposure)

## 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

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

Contact 3M for more information.

# 15.4. International Regulations

Contact 3M for more information.

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

# **SECTION 16: Other information**

## **NFPA Hazard Classification**

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

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

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