SAFETY DATA SHEETS

This SDS packet was issued with item:

075773833

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

075015623 075015649 075773411 075773601 075773791 075793914 075793955 075794037 079563330 273014404

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

075015656 075769542 075793922

MATERIAL SAFETY DATA SHEET 3MTM ESPETM IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS ADHESIVE 02/10/12



Material Safety Data Sheet

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PRODUCT NAME: 3MTM ESPETM IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/

IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/

IMPREGUM GRARANT SOFT LB PLUS ADHESIVE

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 02/10/12 **Supercedes Date:** 02/10/12

Document Group: 16-5656-0

ID Number(s):

70-2011-3279-5, 70-2011-3411-4, 70-2011-3797-6

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

16-4015-0, 16-2742-1, 16-2740-5, 16-5565-3, 16-5566-1

Revision Changes:

Kit: ID Number(s) was modified.

Kit: Component document group number(s) was modified.

Page Heading: Product name was modified.

Kit: Product name was modified.

Copyright was modified.

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MATERIAL SAFETY DATA SHEET 3MTM ESPETM IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS ADHESIVE 02/10/12

OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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3M USA MSDSs are available at www.3M.com



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM ESPETM ImpregumTM PentaTM HB Soft Base Paste

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 12/08/11 **Supercedes Date:** 08/30/10

Document Group: 16-2740-5

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impressions

SECTION 2: INGREDIENTS

<u>Ingredient</u>	C.A.S. No.	% by Wt
POLYETHER	110531-92-5	50 - 60
FATTY ACID TRIGLYCERIDES	67701-27-3	15 - 25
POLYMERIC ACETATE	91825-26-2	10 - 20
DIBENZYL TOLUENE	26898-17-9	5 - 10
DIATOMACEOUS EARTH	68855-54-9	1 - 5
CRISTOBALITE	14464-46-1	1 - 5
1-DODECYLIMIDAZOLE	4303-67-7	< 1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: Different colors, characteristic odor

General Physical Form: Solid

Immediate health, physical, and environmental hazards: May cause allergic skin reaction.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

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

Inhalation:

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

Ingestion:

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

Target Organ Effects:

This product contains Cristobalite (CASRN 14464-46-1). Cancer of the lungs and silicosis has been associated with cristobalite. No exposure to cristobalite is anticipated during normal intended handling of the paste or cured material and therefore, the health effects associated with cristobalite are not expected during the foreseeable use of this product.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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Unusual Fire and Explosion Hazards: Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air.

6.2. Environmental precautions

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Collect as much of the spilled material as possible. Clean up residue.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid skin contact. Wash hands after handling and before eating. Avoid eye contact with dust or airborne particles.

7.2 STORAGE

Store away from heat. Store out of direct sunlight. Store away from areas where product may come into contact with food or pharmaceuticals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

8.2.2 Skin Protection

Avoid skin contact. Avoid prolonged or repeated skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

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8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable. Do not ingest.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
CRISTOBALITE	ACGIH	TWA, respirable	$\overline{0.025}$ mg/m3	
		fraction		
CRISTOBALITE	OSHA	TWA concentration,	0.05 mg/m3	
		respirable		
CRISTOBALITE	OSHA	TWA concentration,	0.15 mg/m3	
		as total dust		
SILICA, AMORPHOUS	OSHA	TWA concentration	0.8 mg/m3	
SILICA, AMORPHOUS	OSHA	TWA	20 millions of	
			particles/cu. ft.	

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

Odor, Color, Grade: Different colors, characteristic odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableBoiling PointNot Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

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

pH No Data Available
Melting point No Data Available

Solubility in Water Nil

Evaporation rateNot ApplicableVolatile Organic CompoundsNot ApplicableKow - Oct/Water partition coefNo Data AvailablePercent volatileNot ApplicableVOC Less H2O & Exempt SolventsNot Applicable

Viscosity 40000 - 150000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance Condition

Carbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, incinerate in an industrial or commercial facility.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

BA-ESPE-3173-1, LE-FSFD-3173-1

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

SECTION 15: REGULATORY INFORMATION

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

STATE REGULATIONS

Contact 3M for more information.

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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 Reactivity: 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.

Revision Changes:

Section 1: Product name was modified.

Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 7: Handling information was modified.

Section 7: Storage information was modified.

Section 8: Skin protection phrase was modified.

Section 8: Prevention of swallowing information was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Page Heading: Product name was modified.

Section 9: Vapor density value was modified.

Section 9: Vapor pressure value was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 5: Autoignition temperature information was modified.

Section 5: Flash point information was modified.

Section 9: Property description for optional properties was modified.

Page 6 of 7

Section 9: Specific gravity information was modified.

Section 9: pH information was modified.

Section 9: Melting point information was modified.

Section 9: Solubility in water text was modified.

Section 9: Flash point information was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 9: Autoignition temperature information was modified.

Section 2: Ingredient table was modified.

Section 6: 6.2. Environmental precautions heading was modified.

Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was modified.

Section 3: Other potential health effects heading was added.

Section 3: Other potential health effects was added.

Section 8: Exposure guidelines ingredient information was added.

Section 8: Exposure guidelines data source legend was added.

Section 16: Web address was added.

Section 8: Hand protection information was added.

Section 1: Address was added.

Copyright was added.

Company logo was added.

Telephone header was added.

Company Telephone was added.

Section 1: Emergency phone information was added.

Section 1: Emergency phone information was deleted.

Company Logo was deleted.

Copyright was deleted.

Section 16: Web address heading was deleted.

Section 1: Address line 1 was deleted.

Section 1: Address line 2 was deleted.

Section 8: Exposure guidelines information - none - was deleted.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM ESPETM ImpregumTM PentaTM Soft Catalyst

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 02/08/12 **Supercedes Date:** 05/16/08

Document Group: 16-2742-1

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impressions

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
CITRIC ESTER	77-90-7	35 - 50
SULFONIUM SALT	72140-65-9	15 - 30
SILANE TREATED SILICA	68909-20-6	20 - 30
DIATOMACEOUS EARTH	68855-54-9	10 - 20
CRISTOBALITE	14464-46-1	1 - 10
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: Dark red color, slightly acrid odor

General Physical Form: Solid

Immediate health, physical, and environmental hazards: May cause target organ effects. 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

Page 1 of 8

ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

3.2 POTENTIAL HEALTH EFFECTS

Eve Contact:

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

Skin Contact:

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation:

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

Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

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.

This product contains Cristobalite (CASRN 14464-46-1). Cancer of the lungs and silicosis has been associated with cristobalite. No exposure to cristobalite is anticipated during normal intended handling of the paste or cured material and therefore, the health effects associated with cristobalite are not expected during the foreseeable use of this product.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

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5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. 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.

6.2. Environmental precautions

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Collect as much of the spilled material as possible. 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 MSDS.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid eye contact with dust or airborne particles.

7.2 STORAGE

Store away from heat. Store out of direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

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8.2.2 Skin Protection

Avoid skin contact. Avoid prolonged or repeated skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
Borates	ACGIH	TWA, inhalable	$\frac{1}{2}$ mg/m3	
Borates	ACGIH	fraction STEL, inhalable	6 mg/m3	
Doracs	ACOIII	fraction	o mg/m3	
CRISTOBALITE	ACGIH	TWA, respirable	0.025 mg/m3	
		fraction		
CRISTOBALITE	OSHA	TWA concentration,	0.05 mg/m3	
		respirable		
CRISTOBALITE	OSHA	TWA concentration,	0.15 mg/m3	
		as total dust		
SILICA, AMORPHOUS	OSHA	TWA concentration	0.8 mg/m3	
SILICA, AMORPHOUS	OSHA	TWA	20 millions of	
			particles/cu. ft.	

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

Odor, Color, Grade: Dark red color, slightly acrid odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNo flash pointFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableBoiling PointNot Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

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

pH No Data AvailableMelting point No Data Available

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Solubility in Water Nil

Evaporation rate Not Applicable **Volatile Organic Compounds** Not Applicable **Kow - Oct/Water partition coef** No Data Available Percent volatile Not Applicable **VOC Less H2O & Exempt Solvents** Not Applicable No Data Available Viscosity

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Condition **Substance** Irritant Vapors or Gases **During Combustion**

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of completely cured (or polymerized) wastes in a sanitary landfill.

Incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

CA-ESPE-3173-1, LE-FSFD-3173-8

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

SECTION 15: REGULATORY INFORMATION

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

STATE REGULATIONS

Contact 3M for more information.

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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: 1 Reactivity: 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.

Revision Changes:

Section 1: Product name was modified.

Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 3: Potential effects from eye contact was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Potential effects from inhalation information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 7: Handling information was modified.

Page 6 of 8

- Section 8: Engineering controls information was modified.
- Section 8: Skin protection phrase was modified.
- Section 8: Prevention of swallowing information was modified.
- Section 10: Hazardous decomposition or by-products table was modified.
- Section 13: Waste disposal method information was modified.
- Section 8: Eye/face protection information was modified.
- Section 4: First aid for skin contact decontamination was modified.
- Section 4: First aid for skin contact medical assistance was modified.
- Section 14: Transportation legal text was modified.
- Page Heading: Product name was modified.
- Section 9: Vapor density value was modified.
- Section 9: Vapor pressure value was modified.
- Section 9: Boiling point information was modified.
- Section 5: Flammable limits (UE) information was modified.
- Section 5: Flammable limits (LEL) information was modified.
- Section 5: Autoignition temperature information was modified.
- Section 5: Flash point information was modified.
- Section 9: Property description for optional properties was modified.
- Section 9: Specific gravity information was modified.
- Section 9: pH information was modified.
- Section 9: Melting point information was modified.
- Section 9: Solubility in water text was modified.
- Section 9: Flash point information was modified.
- Section 9: Flammable limits (LEL) information was modified.
- Section 9: Flammable limits (UEL) information was modified.
- Section 9: Autoignition temperature information was modified.
- Section 2: Ingredient table was modified.
- Section 8: Exposure guidelines ingredient information was modified.
- Section 3: Other potential health effects heading was added.
- Section 4: First aid for skin contact termination of exposure was added.
- Section 4: First aid for skin contact handling was added.
- Section 4: First aid for ingestion (swallowing) decontamination was added.
- Section 4: First aid for ingestion (swallowing) intervention was added.
- Section 4: First aid for ingestion (swallowing) medical assistance was added.
- Section 3: Immediate other hazard(s) was added.
- Section 3: Other health effects information was added.
- Section 3: Other potential health effects was added.
- Section 6: 6.2. Environmental precautions heading was added.
- Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.
- Section 10.1 Conditions to avoid heading was added.
- Section 10.2 Materials to avoid heading was added.
- Section 16: Web address was added.
- Section 6: Personal precautions information was added.
- Section 6: Environmental procedures information was added.
- Section 6: Methods for cleaning up information was added.
- Section 10: Materials to avoid physical property was added.
- Section 10: Conditions to avoid physical property was added.
- Section 8: Hand protection information was added.
- Section 1: Address was added.
- Copyright was added.
- Company logo was added.
- Section 6: Clean-up methods heading was added.
- Telephone header was added.
- Company Telephone was added.
- Section 1: Emergency phone information was added.
- Section 1: Emergency phone information was deleted.

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Company Logo was deleted.

Copyright was deleted.

Section 16: Web address heading was deleted.

Section 3: Immediate physical hazard(s) comment was deleted.

Section 6: Release measures information was deleted.

Section 6: Release measures heading was deleted.

Section 10: Materials and conditions to avoid physical property was deleted.

Section 1: Address line 1 was deleted.

Section 1: Address line 2 was deleted.

Section 4: First aid for ingestion (swallowing) - none - was deleted.

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3M USA MSDSs are available at www.3M.com

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Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 30601 POLYETHER ADHESIVE - 17 ML BOTTLE (NA)

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

ADDRESS: 3M Center

St. Paul. MN 55144-1000

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

Issue Date: 03/02/11 **Supercedes Date:** 04/09/10

Document Group: 16-4015-0

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals. Specific Use: Used in impressioning systems.

SECTION 2: INGREDIENTS

<u>Ingredient</u>	C.A.S. No.	% by Wt
ETHYL ACETATE	141-78-6	25 - 50
HEPTANE	142-82-5	25 - 35
ACETONE	67-64-1	5 - 15
METHYLCYCLOHEXANE	108-87-2	5 - 10
FORMALDEHYDE, POLYMER WITH 1,3-BENZENEDIOL AND 4-(1,1-	59633-97-5	0 - 5
DIMETHYLETHYL)PHENOL		
POLYCHLOROPRENE	9010-98-4	0 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid

Odor, Color, Grade: Blue in color, characteristic solvent odor.

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause target organ effects. 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.

3.2 POTENTIAL HEALTH EFFECTS

Eve Contact:

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

Skin Contact:

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation:

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

May be absorbed following inhalation and cause target organ effects.

Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

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.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature No Data Available

Flash Point 30 °F [Test Method: Closed Cup]

Flammable Limits(LEL)

No Data Available

Flammable Limits(UEL)

No Data Available

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. 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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with detergent and water. Seal the container.

Page 3 of 8

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Contents may be under pressure, open carefully. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid skin contact.

7.2 STORAGE

Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use in an enclosed process area is recommended. Use in a well-ventilated area. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

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

8.2.2 Skin Protection

Avoid skin contact.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Not applicable. Do not ingest.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
ACETONE	ACGIH	TWA	500 ppm	
ACETONE	ACGIH	STEL	750 ppm	
ACETONE	OSHA	TWA	2400 mg/m3	
ETHYL ACETATE	ACGIH	TWA	400 ppm	
ETHYL ACETATE	OSHA	TWA	1400 mg/m3	
HEPTANE	OSHA	TWA	2000 mg/m3	
Heptane, all isomers	ACGIH	TWA	400 ppm	
Heptane, all isomers	ACGIH	STEL	500 ppm	
METHYLCYCLOHEXANE	ACGIH	TWA	400 ppm	

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METHYLCYCLOHEXANE OSHA TWA 2000 mg/m3

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Liquid

Odor, Color, Grade: Blue in color, characteristic solvent odor.

General Physical Form: Liquid

 ${\bf Autoignition \ temperature} \qquad \qquad No \ Data \ Available$

Flash Point 30 °F [Test Method: Closed Cup]

Flammable Limits(LEL)

No Data Available
No Data Available
No Data Available

Boiling Point 133 °F

DensityNo Data Available **Vapor Density**2 - 4 [Ref Std: AIR=1]

Vapor Pressure 180 mmHg

Specific Gravity 0.8 - 0.9 [*Ref Std:* WATER=1]

pH No Data Available
Melting point No Data Available

Solubility in Water Moderate

Evaporation rate Approximately 1 [*Ref Std:* BUOAC=1]

Volatile Organic Compounds

No Data Available

VOC Less H2O & Exempt Solvents

No Data Available

Viscosity

40000 centinoise

Viscosity 40000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

Sparks and/or flames

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u> <u>Condition</u>

Carbon monoxide During Combustion
Carbon dioxide During Combustion
Irritant Vapors or Gases During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

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

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

70-2011-0648-4, 70-2011-0895-1, 70-2011-0997-5

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

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

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

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient (Category if applicable)</u>	C.A.S. No	Regulation	Status
HEPTANE (Heptane)	142-82-5	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	
HEPTANE	142-82-5	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	

STATE REGULATIONS

Contact 3M for more information.

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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 Reactivity: 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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Revision Changes:

Copyright was modified.

Section 3: Potential effects from inhalation information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 14: Transportation legal text was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 2: Ingredient table was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 15: TSCA section 12[b] information was modified.

Section 6: Methods for cleaning up information was modified.

Section 3: Immediate other hazard(s) was added.

Section 6: 6.2. Environmental precautions heading was added.

Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.

Section 6: Clean-up methods heading was added.

Section 6: Release measures heading was deleted.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 12/10/12 **Supercedes Date:** 02/07/12

Document Group: 16-5565-3

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impression

SECTION 2: INGREDIENTS

Ingredient	<u>C.A.S. No.</u>	<u>% by Wt</u>
POLYETHER	110531-92-5	75 - 85
FATTY ACIDS TRIGLYCERIDES	67701-27-3	1 - 10
DIATOMACEOUS EARTH	68855-54-9	1 - 10
DIBENZYL TOLUENE	26898-17-9	1 - 10
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5
C.I. PIGMENT WHITE 5	1345-05-7	1 - 5
1-DODECYLIMIDAZOLE	4303-67-7	< 1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

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

General Physical Form: Solid

Immediate health, physical, and environmental hazards: No immediate health, physical, or environmental hazards are anticipated.

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/IMPREGUM GARANT SOFT LB BASE 12/10/12

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Inhalation:

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

Ingestion:

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

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. **Skin Contact:** Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNot ApplicableFlash PointNo flash pointFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: During a fire irritating gases may develop.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE 12/10/12

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air.

6.2. Environmental precautions

Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Collect as much of the spilled material as possible. Clean up residue with detergent and water.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid prolonged or repeated skin contact.

7.2 STORAGE

Store away from heat.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact. Gloves not normally required.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
BARIUM, SOLUBLE COMPOUNDS	ACGIH	TWA, as Ba	0.5 mg/m3	
BARIUM, SOLUBLE COMPOUNDS	OSHA	TWA, as Ba	0.5 mg/m3	
SILICA, AMORPHOUS	OSHA	TWA concentration	0.8 mg/m3	
SILICA, AMORPHOUS	OSHA	TWA	20 millions of	

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE 12/10/12

particles/cu. ft.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

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

General Physical Form: Solid

Autoignition temperatureNot ApplicableFlash PointNo flash pointFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableBoiling PointNot ApplicableDensity1 g/cm3 - 1.2 g/cm3Vapor DensityNot Applicable

Vapor Pressure No Data Available

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

pH Not Applicable
Melting point Not Applicable

Solubility in WaterNegligibleEvaporation rateNot ApplicableVolatile Organic CompoundsNo Data AvailableKow - Oct/Water partition coefNo Data AvailablePercent volatileNo Data AvailableVOC Less H2O & Exempt SolventsNo Data AvailableViscosity40 Pa-s - 150 Pa-s

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE 12/10/12

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Cure (harden, set, or react) the product according to product instructions.

Dispose of completely cured (or polymerized) wastes in a sanitary landfill.

As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

LE-FSFD-3061-2

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

SECTION 15: REGULATORY INFORMATION

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):

<u>Ingredient</u>	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

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/IMPREGUM GARANT SOFT LB BASE 12/10/12

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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: 1 Reactivity: 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.

Revision Changes:

Section 2: Ingredient table was modified.

Section 15: EPCRA 313 information was added.

Section 15: EPCRA 313 text was added.

Section 8: Exposure guidelines ingredient information was added.

Section 8: Exposure guidelines information - none - was deleted.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

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

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

Issue Date: 02/07/12 **Supercedes Date:** 02/10/10

Document Group: 16-5566-1

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impression

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
POLYMERIC ACETATE	91825-26-2	25 - 35
DIATOMACEOUS EARTH	68855-54-9	20 - 30
CITRIC ESTER	77-90-7	10 - 20
SULFONIUM SALT	72140-65-9	10 - 20
DIBENZYL TOLUENE	26898-17-9	1 - 10
SILANE TREATEAD SILICA	68909-20-6	1 - 10
FATTY ACIDS TRIGLYCERIDES	67701-27-3	1 - 5
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: Red colored pastes, slightly acrid odor

General Physical Form: Solid

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/07/12

Immediate health, physical, and environmental hazards: May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Inhalation:

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

Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

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.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention. No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNot ApplicableFlash PointNo flash pointFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/07/12

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air.

6.2. Environmental precautions

Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Collect as much of the spilled material as possible. Clean up residue.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid prolonged or repeated skin contact.

7.2 STORAGE

Store away from heat.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact. Gloves not normally required.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/IMPREGUM GARANT SOFT LB CATALYST

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

Odor, Color, Grade: Red colored pastes, slightly acrid odor

General Physical Form:

Autoignition temperature Not Applicable **Flash Point** No flash point Not Applicable Flammable Limits(LEL) Flammable Limits(UEL) Not Applicable Not Applicable **Boiling Point** 1.1 g/cm3 - 1.2 g/cm3 **Density** Vapor Density No Data Available

Vapor Pressure No Data Available

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

Not Applicable **Melting point** No Data Available

Negligible Solubility in Water **Evaporation rate** Not Applicable Not Applicable **Volatile Organic Compounds Kow - Oct/Water partition coef** No Data Available Percent volatile Not Applicable **VOC Less H2O & Exempt Solvents** Not Applicable

Viscosity No Data Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance Condition Carbon monoxide **During Combustion** Carbon dioxide **During Combustion**

Page 4 of 7

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/07/12

Irritant Vapors or Gases

During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Cure (harden, set, or react) the product according to product instructions.

Dispose of completely absorbed waste product in a sanitary landfill. As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

Combustion products will include HF. Facility must be capable of handling halogenated materials.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

LE-FSFD-6306-1

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

SECTION 15: REGULATORY INFORMATION

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

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

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

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/07/12

FDA.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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: 1 Reactivity: 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.

Revision Changes:

Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Section 8: Eye/face protection information was modified.

Section 14: Transportation legal text was modified.

Section 9: Vapor density value was modified.

Section 9: Vapor pressure value was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 5: Autoignition temperature information was modified.

Section 5: Flash point information was modified.

Section 9: Property description for optional properties was modified.

Section 9: Specific gravity information was modified.

Section 9: pH information was modified.

Section 9: Melting point information was modified.

Section 9: Solubility in water text was modified.

Section 9: Flash point information was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 9: Autoignition temperature information was modified.

Section 2: Ingredient table was modified.

Section 10: Materials to avoid physical property was modified.

Section 10: Conditions to avoid physical property was modified.

Section 9: Density information was added.

Section 6: 6.2. Environmental precautions heading was added.

Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.

Section 16: Web address was added.

Section 1: Address was added.

Copyright was added.

Company logo was added.

Section 6: Clean-up methods heading was added.

Telephone header was added.

Page 6 of 7

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/07/12

Company Telephone was added.

Section 1: Emergency phone information was added. Section 1: Emergency phone information was deleted.

Company Logo was deleted.

Copyright was deleted.

Section 16: Web address heading was deleted.

Section 6: Release measures heading was deleted.

Section 1: Address line 1 was deleted.

Section 1: Address line 2 was deleted.

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MATERIAL SAFETY DATA SHEET 3MTM ESPETM IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA H DUOSOFT/ IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS ADHESIVE 02/11/10



Material Safety Data Sheet

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PRODUCT NAME: 3MTM ESPETM IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/

IMPREGUM PENTA H DUOSOFT/ IMPREGUM PENTA SOFT HB/

IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS

ADHESIVE

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 02/11/10 **Supercedes Date:** 06/27/08

Document Group: 16-5656-0

ID Number(s):

70-2011-3279-5, 70-2011-3408-0, 70-2011-3411-4

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

16-4015-0, 16-2742-1, 16-2740-5, 16-5565-3, 16-5566-1

Revision Changes:

Copyright was modified.

Kit: Component document group number(s) was modified.

Page Heading: Product name was modified.

Kit: Product name was modified.

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MATERIAL SAFETY DATA SHEET 3MTM ESPETM IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA H DUOSOFT/ IMPREGUM PENTA SOFT HB/ IMPREGUM GARANT L DUOSOFT/ IMPREGUM GRARANT SOFT LB PLUS ADHESIVE 02/11/10

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA H

DUOSOFT/ IMPREGUM PENTA SOFT HB BASE

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

ADDRESS: 3M Center

St. Paul. MN 55144-1000

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

Issue Date: 08/30/10 **Supercedes Date:** 09/25/02

Document Group: 16-2740-5

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impressions

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	% by Wt
POLYETHER	Trade Secret	50 - 60
FATTY ACID TRIGLYCERIDES	Trade Secret	10 - 20
POLYMERIC ACETATE	Trade Secret	10 - 20
DIATOMACEOUS EARTH	68855-54-9	5 - 10
DIBENZYL TOLUENE	Trade Secret	5 - 10
1-DODECYLIMIDAZOLE	4303-67-7	< 1.0

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: Different colors, characteristic odor

General Physical Form: Solid

Immediate health, physical, and environmental hazards: May cause allergic skin reaction.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

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

Inhalation:

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

Ingestion:

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

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot Applicable

Flammable Limits - UEL

Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air.

Environmental procedures

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Collect as much of the spilled material as possible. Clean up residue.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Avoid skin contact. Wash hands after handling and before eating.

7.2 STORAGE

Store away from heat. Store out of direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

.

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not ingest.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

Odor, Color, Grade: Different colors, characteristic odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot ApplicableBoiling pointNot Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

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

pHNo Data AvailableMelting pointNo Data Available

Solubility in Water Nil

Evaporation rateNot ApplicableVolatile Organic CompoundsNot ApplicableKow - Oct/Water partition coefNo Data AvailablePercent volatileNot ApplicableVOC Less H2O & Exempt SolventsNot Applicable

Viscosity 40000 - 150000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: 10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide Carbon dioxide Irritant Vapors or Gases

During Combustion During Combustion During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, incinerate in an industrial or commercial facility.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

BA-ESPE-3173-1, LE-FSFD-3173-1

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

SECTION 15: REGULATORY INFORMATION

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

STATE REGULATIONS

Contact 3M for more information.

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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 Reactivity: 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.

Revision Changes:

- Section 1: Product use information was modified.
- Section 16: NFPA hazard classification heading was modified.
- Section 16: NFPA hazard classification for health was modified.

Copyright was modified.

- Section 3: Potential effects from eye contact was modified.
- Section 3: Potential effects from skin contact information was modified.
- Section 3: Potential effects from inhalation information was modified.
- Section 3: Potential effects from ingestion information was modified.
- Section 5: Fire fighting procedures information was modified.
- Section 7: Handling information was modified.
- Section 8: Skin protection phrase was modified.
- Section 13: Waste disposal method information was modified.
- Section 8: Eye/face protection information was modified.
- Section 15: 311/312 hazard categories heading was modified.
- Section 15: International regulations information was modified.
- Section 15: State regulations information was modified.
- Section 15: US federal regulations information was modified.
- Section 4: First aid for skin contact decontamination was modified.
- Section 4: First aid for skin contact medical assistance was modified.
- Section 10: Hazardous polymerization heading was modified.
- Section 14: Transportation legal text was modified.
- Section 16: NFPA explanation was modified.
- Section 15: Inventories information was modified.
- Section 12: Ecotoxicological information heading was modified.
- Section 12: Chemical fate information heading was modified.
- Section 9: Property description for optional properties was modified.
- Section 16: NFPA hazard classification for special hazards was modified.
- Section 3: Immediate skin hazard(s) was added.
- Section 4: First aid for skin contact termination of exposure was added.
- Section 4: First aid for skin contact handling was added.
- Section 4: First aid for ingestion (swallowing) decontamination was added.
- Section 4: First aid for ingestion (swallowing) intervention was added.
- Section 4: First aid for ingestion (swallowing) medical assistance was added.
- Section 2: Ingredient phrase was added.
- Section 12: Ecotoxicological phrase was added.
- Section 12: Chemical Fate phrase was added.
- Section 14: ID Number(s) Template 1 was added.
- Section 2: Ingredient table was added.
- Section 8: Exposure guidelines information none was added.
- Section 6: Environmental procedures heading was added.
- Section 6: Personal precautions heading was added.
- Section 10.1 Conditions to avoid heading was added.
- Section 10.2 Materials to avoid heading was added.
- Section 6: Personal precautions information was added.
- Section 6: Environmental procedures information was added.
- Section 6: Methods for cleaning up information was added.
- Section 10: Materials to avoid physical property was added.

Section 10: Conditions to avoid physical property was added.

Section 6: Clean-up methods heading was added.

Section 3: Immediate physical hazard(s) comment was deleted.

Section 6: Release measures information was deleted.

Section 6: Release measures heading was deleted.

Section 10: Materials and conditions to avoid physical property was deleted.

Section 12: Ecotoxicological ecotox article information was deleted.

Section 12: Ecotoxicological ecofate information was deleted.

Section 4: First aid for ingestion (swallowing) - none - was deleted.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IMPREGUM PENTA SOFT/ IMPREGUM PENTA SOFT MB/ IMPREGUM PENTA H

DUOSOFT/ IMPREGUM PENTA SOFT HB CATALYST

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

ADDRESS: 3M Center

St. Paul. MN 55144-1000

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

Issue Date: 05/16/2008 **Supercedes Date:** 10/02/2002

Document Group: 16-2742-1

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impressions

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	% by Wt
CITRIC ESTER	77-90-7	35 - 50
SILANE TREATED SILICA	68909-20-6	20 - 30
SULFONIUM SALT	Trade Secret	15 - 30
DIATOMACEOUS EARTH	68855-54-9	10 - 20
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: Dark red color, slightly acrid odor

General Physical Form: Solid

Immediate health, physical, and environmental hazards: No immediate health, physical, or environmental hazards are

anticipated.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Skin Contact:

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

Inhalation:

No health effects are expected.

Ingestion:

No health effects are expected.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: No need for first aid is anticipated.

If Swallowed: No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. Collect as much of the spilled material as possible. Clean up residue. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Avoid prolonged or repeated skin contact.

7.2 STORAGE

Store away from heat. Store out of direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

8.2.2 Skin Protection

Gloves not normally required. Avoid prolonged or repeated skin contact.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not ingest.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u> <u>Authority</u> <u>Type</u> <u>Limit</u> <u>Additional Information</u>

DIATOMACEOUS EARTH OSHA TWA, as total dust 6 mg/m3 Table Z-1A

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

Odor, Color, Grade: Dark red color, slightly acrid odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot ApplicableBoiling pointNot Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

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

pHNo Data AvailableMelting pointNo Data Available

Solubility in Water Nil

Evaporation rateNot ApplicableVolatile Organic CompoundsNot ApplicablePercent volatileNot ApplicableVOC Less H2O & Exempt SolventsNot ApplicableViscosityNo Data Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Heat

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u> <u>Condition</u>

Irritant Vapors or Gases During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in an industrial or commercial facility in the presence of a combustible material. Combustion products will include HF. Facility must be capable of handling halogenated materials.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

CA-ESPE-3173-1, LE-FSFD-3173-8

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

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

STATE REGULATIONS

Contact 3M for more information.

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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: 1 Reactivity: 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.

Revision Changes:

Section 1: Product use information was modified.

Section 16: NFPA hazard classification heading was modified.

Copyright was modified.

Section 5: Fire fighting procedures information was modified.

Section 6: Release measures information was modified.

Section 8: Skin protection phrase was modified.

Section 13: Waste disposal method information was modified.

Section 15: 311/312 hazard categories heading was modified.

Section 15: International regulations information was modified.

Section 15: State regulations information was modified.

Section 15: US federal regulations information was modified.

Section 10: Hazardous polymerization heading was modified.

Section 16: NFPA explanation was modified.

Section 15: Inventories information was modified.

Section 12: Ecotoxicological information heading was modified.

Section 12: Chemical fate information heading was modified.

Section 16: NFPA hazard classification for special hazards was modified.

Section 2: Ingredient phrase was added.

Section 12: Ecotoxicological phrase was added.

Section 12: Chemical Fate phrase was added.

Section 14: ID Number(s) Template 1 was added.

Section 2: Ingredient table was added.

Section 8: Exposure guidelines ingredient information was added.

Section 8: Exposure guidelines data source legend was added.

Section 12: Ecotoxicological ecotox article information was deleted.

Section 12: Ecotoxicological ecofate information was deleted.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 30601 POLYETHER ADHESIVE - 17 ML BOTTLE (NA)

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

ADDRESS: 3M Center

St. Paul. MN 55144-1000

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

Issue Date: 03/02/11 **Supercedes Date:** 04/09/10

Document Group: 16-4015-0

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals. Specific Use: Used in impressioning systems.

SECTION 2: INGREDIENTS

<u>Ingredient</u>	C.A.S. No.	% by Wt
ETHYL ACETATE	141-78-6	25 - 50
HEPTANE	142-82-5	25 - 35
ACETONE	67-64-1	5 - 15
METHYLCYCLOHEXANE	108-87-2	5 - 10
FORMALDEHYDE, POLYMER WITH 1,3-BENZENEDIOL AND 4-(1,1-	59633-97-5	0 - 5
DIMETHYLETHYL)PHENOL		
POLYCHLOROPRENE	9010-98-4	0 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid

Odor, Color, Grade: Blue in color, characteristic solvent odor.

General Physical Form: Liquid

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Immediate health, physical, and environmental hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause target organ effects. 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.

3.2 POTENTIAL HEALTH EFFECTS

Eve Contact:

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

Skin Contact:

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation:

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

May be absorbed following inhalation and cause target organ effects.

Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

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.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

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If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature No Data Available

Flash Point 30 °F [Test Method: Closed Cup]

Flammable Limits(LEL)

No Data Available

Flammable Limits(UEL)

No Data Available

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. 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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with detergent and water. Seal the container.

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In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Contents may be under pressure, open carefully. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid skin contact.

7.2 STORAGE

Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use in an enclosed process area is recommended. Use in a well-ventilated area. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

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

8.2.2 Skin Protection

Avoid skin contact.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Not applicable. Do not ingest.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
ACETONE	ACGIH	TWA	500 ppm	
ACETONE	ACGIH	STEL	750 ppm	
ACETONE	OSHA	TWA	2400 mg/m3	
ETHYL ACETATE	ACGIH	TWA	400 ppm	
ETHYL ACETATE	OSHA	TWA	1400 mg/m3	
HEPTANE	OSHA	TWA	2000 mg/m3	
Heptane, all isomers	ACGIH	TWA	400 ppm	
Heptane, all isomers	ACGIH	STEL	500 ppm	
METHYLCYCLOHEXANE	ACGIH	TWA	400 ppm	

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METHYLCYCLOHEXANE OSHA TWA 2000 mg/m3

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Liquid **Specific Physical Form:**

Odor, Color, Grade: Blue in color, characteristic solvent odor.

General Physical Form: Liquid

No Data Available **Autoignition temperature**

30 °F [Test Method: Closed Cup] **Flash Point**

Flammable Limits(LEL) No Data Available Flammable Limits(UEL) No Data Available

Boiling Point 133 °F

Density No Data Available **Vapor Density** 2 - 4 [*Ref Std:* AIR=1]

Vapor Pressure 180 mmHg

0.8 - 0.9 [*Ref Std:* WATER=1] **Specific Gravity**

pΗ No Data Available **Melting point** No Data Available

Solubility in Water Moderate

Evaporation rate Approximately 1 [Ref Std: BUOAC=1]

Volatile Organic Compounds No Data Available **Kow - Oct/Water partition coef** No Data Available Percent volatile No Data Available **VOC Less H2O & Exempt Solvents** No Data Available

Viscosity 40000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Sparks and/or flames

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

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Hazardous Decomposition or By-Products

<u>Substance</u> <u>Condition</u>

Carbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

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

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

70-2011-0648-4, 70-2011-0895-1, 70-2011-0997-5

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

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

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311/312 Hazard Categories:

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

This material contains a chemical which requires export notification under TSCA Section 12[b]:

Ingredient (Category if applicable)	C.A.S. No	Regulation	Status
HEPTANE (Heptane)	142-82-5	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	
HEPTANE	142-82-5	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	

STATE REGULATIONS

Contact 3M for more information.

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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 Reactivity: 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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Revision Changes:

Copyright was modified.

Section 3: Potential effects from inhalation information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 14: Transportation legal text was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 2: Ingredient table was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 15: TSCA section 12[b] information was modified.

Section 6: Methods for cleaning up information was modified.

Section 3: Immediate other hazard(s) was added.

Section 6: 6.2. Environmental precautions heading was added.

Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.

Section 6: Clean-up methods heading was added.

Section 6: Release measures heading was deleted.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IMPREGUM GARANT L DUOSOFT/IMPREGUM GARANT SOFT LB BASE

MANUFACTURER: 3N

DIVISION: 3M ESPE Dental Products

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 02/10/10 **Supercedes Date:** 10/27/08

Document Group: 16-5565-3

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impression

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
POLYETHER	Trade Secret	75 - 85
DIBENZYL TOLUENE	Trade Secret	1 - 10
DIATOMACEOUS EARTH	68855-54-9	1 - 10
FATTY ACIDS TRIGLYCERIDES	Trade Secret	1 - 10
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5
C.I. PIGMENT WHITE 5	1345-05-7	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

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

General Physical Form: Solid

Immediate health, physical, and environmental hazards: No immediate health, physical, or environmental hazards are

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE 02/10/10

anticipated.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Inhalation:

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

Ingestion:

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

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: During a fire irritating gases may develop.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:

Ventilate the area with fresh air.

Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Collect as much of the spilled material as possible. Clean up residue with detergent and water.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid prolonged or repeated skin contact.

7.2 STORAGE

Store away from heat.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact. Gloves not normally required.

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/IMPREGUM GARANT SOFT LB BASE

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

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

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot ApplicableBoiling pointNot Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

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

pH Not Applicable
Melting point Not Applicable

Solubility in Water Nil

Evaporation rateNot ApplicableVolatile Organic CompoundsNo Data AvailableKow - Oct/Water partition coefNo Data AvailablePercent volatileNo Data AvailableVOC Less H2O & Exempt SolventsNo Data Available

Viscosity 40000 - 150000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Condition

Carbon monoxide Carbon dioxide Irritant Vapors or Gases During Combustion During Combustion During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Cure (harden, set, or react) the product according to product instructions.

Dispose of completely cured (or polymerized) wastes in a sanitary landfill.

As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

LE-FSFD-3061-2

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB BASE 02/10/10

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

STATE REGULATIONS

Contact 3M for more information.

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.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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: 1 Reactivity: 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.

Revision Changes:

Copyright was modified.

Section 7: Handling information was modified.

Section 8: Engineering controls information was modified.

Section 8: Skin protection phrase was modified.

Section 8: Prevention of swallowing information was modified.

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/IMPREGUM GARANT SOFT LB BASE 02/10/10

Section 9: Property description for optional properties was modified.

Section 14: ID Number(s) Template 1 was modified.

Section 2: Ingredient table was modified.

Section 8: Exposure guidelines information - none - was added.

Section 10.1 Conditions to avoid was added.

Section 10.2 Materials to avoid was added.

Section 6: Release measures information was added.

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Section 8: Exposure guidelines data source legend was deleted.

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MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST

MANUFACTURER: 3M

DIVISION: 3M ESPE Dental Products

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 02/10/10 **Supercedes Date:** 10/27/08

Document Group: 16-5566-1

Product Use:

Intended Use: Dental Product

Limitations on Use: For use only by dental professionals

Specific Use: Impression

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	<u>% by Wt</u>
POLYMERIC ACETATE	Trade Secret	25 - 35
DIATOMACEOUS EARTH	68855-54-9	20 - 30
SULFONIUM SALT	Trade Secret	10 - 20
CITRIC ESTER	77-90-7	10 - 20
DIBENZYL TOLUENE	Trade Secret	1 - 10
SILANE TREATEAD SILICA	68909-20-6	1 - 10
POLYETHYLENE-POLYPROPYLENE GLYCOL	9003-11-6	1 - 5
FATTY ACIDS TRIGLYCERIDES	Trade Secret	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/10/10

Odor, Color, Grade: Red colored pastes, slightly acrid odor

General Physical Form: Solid

Immediate health, physical, and environmental hazards:

May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eve Contact:

Mild Eye Irritation: Signs/symptoms may include redness, pain, and tearing.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Inhalation:

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

Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

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.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention. No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/10/10

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air.

Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Collect as much of the spilled material as possible. Clean up residue.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid prolonged or repeated skin contact.

7.2 STORAGE

Store away from heat.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/10/10

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

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

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact. Gloves not normally required.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Paste

Odor, Color, Grade: Red colored pastes, slightly acrid odor

General Physical Form: Solid

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot ApplicableBoiling pointNot Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

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

pH Not ApplicableMelting point No Data Available

Solubility in Water Nil

Evaporation rateNot ApplicableVolatile Organic CompoundsNot ApplicableKow - Oct/Water partition coefNo Data AvailablePercent volatileNot ApplicableVOC Less H2O & Exempt SolventsNot ApplicableViscosityNo Data Available

MATERIAL SAFETY DATA SHEET | IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST 02/10/10

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Heat

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance Condi

Carbon monoxide During Combustion
Carbon dioxide During Combustion
Irritant Vapors or Gases During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Cure (harden, set, or react) the product according to product instructions.

Dispose of completely absorbed waste product in a sanitary landfill. As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

Combustion products will include HF. Facility must be capable of handling halogenated materials.

EPA Hazardous Waste Number (RCRA): Not regulated

MATERIAL SAFETY DATA SHEET	IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATA	LYST
02/10/10		

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SECTION 14:TRANSPORT INFORMATION

LE-FSFD-6306-1

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SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

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311/312 Hazard Categories:

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MATERIAL SAFETY DATA SHEET IMPREGUM GARANT L DUOSOFT/ IMPREGUM GARANT SOFT LB CATALYST

SECTION 16: OTHER INFORMATION

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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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