



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ ESPE™ EXPRESSTM 2 PUTTY QUICK 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: 10/29/12

Supersedes Date: 09/01/09

Document Group: 22-6753-2

Product Use:

Intended Use: Dental product
Limitations on Use: For use only by dental professionals
Specific Use: Impression materials

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
ALUMINA	21645-51-2	30 - 35
CRISTOBALITE	14464-46-1	30 - 35
VINYL POLYDIMETHYLSILOXANE	68083-19-2	20 - 25
HYDROCARBONS	8042-47-5	5 - 10
AMORPHOUS SILICA	112945-52-5	< 5
DIMETHYL METHYL HYDROGEN SILICONE FLUID	68037-59-2	< 5
QUARTZ	14808-60-7	< 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: odorless, green

General Physical Form: Solid

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

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

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.

Target Organ Effects:

This product contains quartz silica. Quartz silica is a form of crystalline silica. Occupational exposure to inhaled crystalline silica has been associated with silicosis and lung cancer. No exposure to crystalline silica is expected during the normal handling and use of this product.

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: 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 temperature

No Data Available

Flash Point

No flash point

Flammable Limits(LEL)

Not Applicable

Flammable Limits(UEL)

Not Applicable

5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

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.

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.

7.2 STORAGE

Store under normal warehouse conditions.

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. Gloves not normally required. Gloves are not required. 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. Wash hands after handling and before eating.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
CRISTOBALITE	ACGIH	TWA, respirable fraction	0.025 mg/m3	
CRISTOBALITE	OSHA	TWA concentration, respirable	0.05 mg/m3	
CRISTOBALITE	OSHA	TWA concentration, as total dust	0.15 mg/m3	
QUARTZ	ACGIH	TWA, respirable fraction	0.025 mg/m3	
QUARTZ	OSHA	TWA concentration, respirable	0.1 mg/m3	
QUARTZ	OSHA	TWA concentration, as total dust	0.3 mg/m3	
HYDROCARBONS	CMRG	TWA	5 mg/m3	
HYDROCARBONS	CMRG	STEL	10 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:	Paste
Odor, Color, Grade:	odorless, green
General Physical Form:	Solid
Autoignition temperature	<i>No Data Available</i>
Flash Point	No flash point
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Boiling Point	<i>Not Applicable</i>
Density	Approximately 1.6 g/cm3
Vapor Density	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Specific Gravity	Approximately 1.6 [Ref Std: WATER=1]
pH	<i>Not Applicable</i>
Melting point	<i>No Data Available</i>

Solubility in Water	Nil
Evaporation rate	No Data Available
Kow - Oct/Water partition coef	No Data Available
Viscosity	No Data Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Not determined

10.2 Materials to avoid

Alkali and alkaline earth metals

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

EPA Hazardous Waste Number (RCRA): Not regulated

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

SECTION 14: TRANSPORT INFORMATION

LE-F100-0323-4

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: 0 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 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 7: Handling 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 8: Eye/face protection information was modified.

Section 14: Transportation legal text was modified.

Section 9: Density information 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: 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 3: Other potential health effects was modified.
 Section 2: Ingredient table was modified.
 Section 8: Exposure guidelines ingredient information was modified.
 Section 13: EPA hazardous waste number (RCRA) heading was added.
 Section 13: EPA hazardous waste number (RCRA) information was added.
 Section 3: Immediate other hazard(s) was added.
 Section 9: Property description for optional properties 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.
 Company Logo was deleted.
 Copyright was deleted.
 Section 16: Web address heading 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.

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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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