

Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3MTM ESPETM EXPRESSTM LIGHT BODY IN TUBES CATALYST

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression Material

Restrictions on use

For use only by dental professionals.

1.3. Supplier's details

MANUFACTURER:

DIVISION: Oral Care Solutions Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA 1-888-3M HELPS (1-888-364-3577) **Telephone:**

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

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

2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|------------------------------------|-------------|------------------------|
| VINYPOLYSILOXANES | 68083-19-2 | 45 - 55 Trade Secret * |
| CRISTOBALITE | 14464-46-1 | 20 - 30 Trade Secret * |
| QUARTZ | 14808-60-7 | 20 - 30 Trade Secret * |
| AMORPHOUS SILICA, CRYSTALLINE FREE | 112945-52-5 | 1 - 10 Trade Secret * |

^{*}The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

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

If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Material will not burn.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance
Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

Condition

During Combustion During Combustion During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|--------------|------------|--------|--------------------------------|----------------------------|
| CRISTOBALITE | 14464-46-1 | ACGIH | TWA(respirable | A2: Suspected human |
| | | | fraction):0.025 mg/m3 | carcin. |
| CRISTOBALITE | 14464-46-1 | OSHA | TWA concentration(as total | |
| | | | dust):0.15 mg/m3;TWA | |
| | | | concentration(respirable):0.05 | |
| | | | mg/m3(1.2 millions of | |
| | | | particles/cu. ft.) | |
| QUARTZ | 14808-60-7 | ACGIH | TWA(respirable | A2: Suspected human |
| | | | fraction):0.025 mg/m3 | carcin. |
| QUARTZ | 14808-60-7 | OSHA | TWA concentration(as total | |
| | | | dust):0.3 mg/m3;TWA | |
| | | | concentration(respirable):0.1 | |
| | | | mg/m3(2.4 millions of | |
| | | | particles/cu. ft.) | |

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

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

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

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety Glasses with side shields

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

Respiratory protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Odor, Color, Grade: characteristic oder, white, paste

Odor threshold No Data Available pН Not Applicable **Melting point** No Data Available **Boiling Point** Not Applicable **Flash Point** Not Applicable **Evaporation rate** No Data Available Flammability (solid, gas) Not Classified Flammable Limits(LEL) No Data Available Flammable Limits(UEL) No Data Available

Negligible **Vapor Pressure**

Vapor Density No Data Available **Density** 1.3 - 1.5 g/cm³

Specific Gravity > 1.3 [*Ref Std:* WATER=1]

Solubility in Water Negligible

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water No Data Available **Autoignition temperature** Not Applicable **Decomposition temperature** No Data Available Viscosity No Data Available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Amines Strong acids Strong bases Strong oxidizing agents

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

product. Once properly mixed and/or cured, the product is safe for its intended use.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

No health effects are expected.

Skin Contact:

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

Eye Contact:

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

Ingestion:

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

Additional Health Effects:

Carcinogenicity:

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

| Ingredient | CAS No. | Class Description | Regulation |
|----------------------|------------|--------------------------------|---|
| SILICA, CRYS AIRRESP | 14464-46-1 | Known human carcinogen | National Toxicology Program Carcinogens |
| SILICA, CRYS AIRRESP | 14808-60-7 | Known human carcinogen | National Toxicology Program Carcinogens |
| CRISTOBALITE | 14464-46-1 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| QUARTZ | 14808-60-7 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|------------------------------------|-------------|---------|---|
| | | Species | , |
| Overall product | Ingestion | | No data available; calculated ATE > 5,000 mg/kg |
| VINYPOLYSILOXANES | Dermal | Rabbit | LD50 > 15,440 mg/kg |
| VINYPOLYSILOXANES | Ingestion | Rat | LD50 > 15,440 mg/kg |
| CRISTOBALITE | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| CRISTOBALITE | Ingestion | | LD50 estimated to be > 5,000 mg/kg |
| QUARTZ | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| QUARTZ | Ingestion | | LD50 estimated to be > 5,000 mg/kg |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Inhalation- | Rat | LC50 > 0.691 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Ingestion | Rat | LD50 > 5,110 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|------------------------------------|-----------|---------------------------|
| | | |
| VINYPOLYSILOXANES | Rabbit | No significant irritation |
| CRISTOBALITE | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |
| QUARTZ | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|------------------------------------|---------|---------------------------|
| VINYPOLYSILOXANES | Rabbit | Mild irritant |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|------------------------------------|---------|-----------------|
| AMORPHOUS SILICA, CRYSTALLINE FREE | Human | Not sensitizing |
| | and | |
| | animal | |

Respiratory Sensitization

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

Germ Cell Mutagenicity

| Germ Cen management | | |
|---------------------|----------|--|
| Name | Route | Value |
| | | |
| CRISTOBALITE | In Vitro | Some positive data exist, but the data are not |

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| | | sufficient for classification |
|------------------------------------|----------|--|
| CRISTOBALITE | In vivo | Some positive data exist, but the data are not |
| | | sufficient for classification |
| QUARTZ | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| QUARTZ | In vivo | Some positive data exist, but the data are not |
| | | sufficient for classification |
| AMORPHOUS SILICA, CRYSTALLINE FREE | In Vitro | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|------------------------------------|------------|---------|--|
| CRISTOBALITE | Inhalation | Human | Carcinogenic |
| | | and | |
| | | animal | |
| QUARTZ | Inhalation | Human | Carcinogenic |
| | | and | |
| | | animal | |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Not | Mouse | Some positive data exist, but the data are not |
| | Specified | | sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|------------------------------------|-----------|----------------------------------|---------|--------------------------|-----------------------------|
| AMORPHOUS SILICA, CRYSTALLINE FREE | Ingestion | Not toxic to female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Ingestion | Not toxic to male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| AMORPHOUS SILICA, CRYSTALLINE FREE | Ingestion | Not toxic to development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

| pecific ranger organ rowerly repeated exposure | | | | | | | |
|--|------------|--------------------|---------------------------------|---------|-------------|--------------|--|
| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure | |
| | | | | | | Duration | |
| CRISTOBALITE | Inhalation | silicosis | Causes damage to organs through | Human | NOAEL Not | occupational | |
| | | | prolonged or repeated exposure | | available | exposure | |
| QUARTZ | Inhalation | silicosis | Causes damage to organs through | Human | NOAEL Not | occupational | |
| | | | prolonged or repeated exposure | | available | exposure | |
| AMORPHOUS SILICA, | Inhalation | respiratory system | All data are negative | Human | NOAEL Not | occupational | |
| CRYSTALLINE FREE | | silicosis | _ | | available | exposure | |

Aspiration Hazard

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

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

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

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

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

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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

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

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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

SECTION 16: Other information

NFPA Hazard Classification

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

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

the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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