



Safety Data Sheet

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| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 20-9267-4 | Version Number: | 3.04 |
| Issue Date: | 02/18/15 | Supersedes Date: | 01/03/08 |

Product identifier

10771PP 3M™ ESPE™ IMPRINT™ 3 PENTA PUTTY

ID Number(s):

70-2011-3010-4

Recommended use

Dental product, Dental impression material.

Restrictions on use

For use only by dental professionals.

Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | 3M ESPE Dental Products |
| ADDRESS: | 3M Center, St. Paul, MN 55144-1000, USA |
| Telephone: | 1-888-3M HELPS (1-888-364-3577) |

Emergency telephone number

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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

20-9257-5, 20-9255-9

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| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 20-9257-5 | Version Number: | 6.00 |
| Issue Date: | 02/25/16 | Supersedes Date: | 10/10/14 |

SECTION 1: Identification

1.1. Product identifier

3M™ ESPE™ IMPRINT™ 3 PENTA PUTTY CATALYST

Product Identification Numbers

LE-F100-0218-7

1.2. Recommended use and restrictions on use

Recommended use

Dental material, Dental impression material.

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Oral Care Solutions Division |
| ADDRESS: | 3M Center, St. Paul, MN 55144-1000, USA |
| Telephone: | 1-888-3M HELPS (1-888-364-3577) |

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

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

2.1. Hazard classification

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 |
|-------------------------------|-------------------|------------------------|
| SODIUM ALUMINUM SILICATE | 37244-96-5 | 60 - 80 Trade Secret * |
| VINYL POLYDIMETHYLSILOXANE | 68083-19-2 | 10 - 30 Trade Secret * |
| WHITE MINERAL OIL (PETROLEUM) | 8042-47-5 | < 5 Trade Secret * |
| POLY(DIMETHYLSILOXANE) | 63148-62-9 | < 3 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:**

No need for first aid is anticipated.

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**

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products**Substance**

Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

Condition

During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

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 |
|-----------------------------------|-------------------|---------------|---------------------------------|--------------------------------|
| SODIUM ALUMINUM SILICATE | 37244-96-5 | CMRG | TWA(respirable):5 mg/m3 | |
| MINERAL OILS, HIGHLY-REFINED OILS | 8042-47-5 | ACGIH | TWA(inhalable fraction):5 mg/m3 | A4: Not class. as human carcin |
| Paraffin oil | 8042-47-5 | OSHA | TWA(as mist):5 mg/m3 | |

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 odor, white, paste |
| Odor threshold | No Data Available |
| pH | Not Applicable |
| Melting point | No Data Available |
| Boiling Point | Not Applicable |
| Evaporation rate | Not Applicable |
| Flammability (solid, gas) | Not Classified |
| Flammable Limits(LEL) | Not Applicable |
| Flammable Limits(UEL) | Not Applicable |
| Vapor Pressure | Not Applicable |
| Vapor Density | Not Applicable |
| Density | >=1.8 g/cm3 |
| Specific Gravity | >=1.8 [Ref Std: WATER=1] |
| Solubility in Water | Negligible |
| Solubility- non-water | No Data Available |
| Partition coefficient: n-octanol/ water | No Data Available |
| Autoignition temperature | No Data Available |
| Decomposition temperature | No Data Available |
| Viscosity | No Data Available |
| Molecular weight | No Data Available |
| Volatile Organic Compounds | Not Applicable |
| Percent volatile | Not Applicable |
| VOC Less H2O & Exempt Solvents | Not Applicable |

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Amines
Amines
Strong bases
Strong acids
Strong oxidizing agents

10.6. Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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

Skin Contact:

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:

May be harmful if swallowed.

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

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|------|-------|---------|-------|
|------|-------|---------|-------|

| | | | |
|-------------------------------|-----------|--------|---|
| Overall product | Ingestion | | No data available; calculated ATE 2,000 - 5,000 mg/kg |
| SODIUM ALUMINUM SILICATE | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| SODIUM ALUMINUM SILICATE | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| VINYL POLYDIMETHYLSILOXANE | Dermal | Rabbit | LD50 > 15,440 mg/kg |
| VINYL POLYDIMETHYLSILOXANE | Ingestion | Rat | LD50 > 15,440 mg/kg |
| WHITE MINERAL OIL (PETROLEUM) | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| WHITE MINERAL OIL (PETROLEUM) | Ingestion | Rat | LD50 > 5,000 mg/kg |
| POLY(DIMETHYLSILOXANE) | Dermal | Rabbit | LD50 > 19,400 mg/kg |
| POLY(DIMETHYLSILOXANE) | Ingestion | Rat | LD50 > 17,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|-------------------------------|------------------------|---------------------------|
| SODIUM ALUMINUM SILICATE | Professional judgement | No significant irritation |
| VINYL POLYDIMETHYLSILOXANE | Rabbit | No significant irritation |
| WHITE MINERAL OIL (PETROLEUM) | Rabbit | No significant irritation |
| POLY(DIMETHYLSILOXANE) | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-------------------------------|------------------------|---------------------------|
| SODIUM ALUMINUM SILICATE | Professional judgement | Mild irritant |
| VINYL POLYDIMETHYLSILOXANE | Rabbit | Mild irritant |
| WHITE MINERAL OIL (PETROLEUM) | Rabbit | Mild irritant |
| POLY(DIMETHYLSILOXANE) | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|-------------------------------|------------|-----------------|
| WHITE MINERAL OIL (PETROLEUM) | Guinea pig | Not sensitizing |

Respiratory Sensitization

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

Germ Cell Mutagenicity

| Name | Route | Value |
|-------------------------------|----------|---------------|
| WHITE MINERAL OIL (PETROLEUM) | In Vitro | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|-------------------------------|------------|-------------------------|------------------|
| WHITE MINERAL OIL (PETROLEUM) | Dermal | Mouse | Not carcinogenic |
| WHITE MINERAL OIL (PETROLEUM) | Inhalation | Multiple animal species | Not carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|-------------------------------|-----------|----------------------------------|---------|-----------------------|-------------------|
| WHITE MINERAL OIL (PETROLEUM) | Ingestion | Not toxic to female reproduction | Rat | NOAEL 4,350 mg/kg/day | 13 weeks |

| | | | | | |
|-------------------------------|-----------|--------------------------------|-----|-----------------------|------------------|
| WHITE MINERAL OIL (PETROLEUM) | Ingestion | Not toxic to male reproduction | Rat | NOAEL 4,350 mg/kg/day | 13 weeks |
| WHITE MINERAL OIL (PETROLEUM) | Ingestion | Not toxic to development | Rat | NOAEL 4,350 mg/kg/day | during gestation |

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

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

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-------------------------------|-----------|-----------------------|--|---------|-----------------------|-------------------|
| WHITE MINERAL OIL (PETROLEUM) | Ingestion | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,381 mg/kg/day | 90 days |
| WHITE MINERAL OIL (PETROLEUM) | Ingestion | liver immune system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,336 mg/kg/day | 90 days |

Aspiration Hazard

| Name | Value |
|-------------------------------|-------------------|
| WHITE MINERAL OIL (PETROLEUM) | Aspiration hazard |

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

SECTION 12: Ecological information**Ecotoxicological information**

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

Chemical fate information

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

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

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

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

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

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

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

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

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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

SECTION 16: Other information

NFPA Hazard Classification

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

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

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Issue Date: 10/09/18

Version Number: 7.01
Supersedes Date: 02/25/16

SECTION 1: Identification

1.1. Product identifier

3M™ ESPE™ IMPRINT™ 3 PENTA™ PUTTY BASE

Product Identification Numbers

LE-F100-0218-4

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression material

Restrictions on use

For use only by dental professionals

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Oral Care Solutions Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

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

2.1. Hazard classification

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.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--|------------|------------------------|
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | None | 60 - 80 Trade Secret * |
| VINYL POLYDIMETHYLSILOXANE | 68083-19-2 | 10 - 20 Trade Secret * |
| PARAFFIN OILS | 8012-95-1 | 1 - 10 Trade Secret * |
| DIMETHYL METHYL HYDROGEN SILICONE FLUID | 68037-59-2 | < 5 Trade Secret * |
| ALUMINUM OXIDE | 1344-28-1 | < 2 Trade Secret * |
| CHROMIUM OXIDE (C.I. 77288) | 1308-38-9 | < 1 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**

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

Condition

During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

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

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Avoid prolonged or repeated skin contact. 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 |
|-------------------------------|-------------------|---------------|--|--------------------------------|
| CHROMIUM (III) COMPOUNDS | 1308-38-9 | ACGIH | TWA(as Cr(III), inhalable fraction):0.003 mg/m3;TWA(as Cr):0.5 mg/m3 | A4: Not class. as human carcin |
| CHROMIUM (III) COMPOUNDS | 1308-38-9 | OSHA | TWA(as Cr):0.5 mg/m3 | |
| Chromium, insoluble salts | 1308-38-9 | OSHA | TWA(as Cr):1 mg/m3 | |
| ALUMINUM OXIDE | 1344-28-1 | OSHA | TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3 | |
| Aluminum, insoluble compounds | 1344-28-1 | ACGIH | TWA(respirable fraction):1 mg/m3 | A4: Not class. as human carcin |

| | | | | |
|---|-----------|-------|---------------------------------|---|
| Mineral oils (untreated and mildly treated) | 8012-95-1 | ACGIH | Limit value not established: | A2: Suspected human carcin., Cntrl all exposr-low as possib |
| MINERAL OILS, HIGHLY-REFINED OILS | 8012-95-1 | ACGIH | TWA(inhalable fraction):5 mg/m3 | A4: Not class. as human carcin |
| PARAFFIN OILS | 8012-95-1 | OSHA | TWA(as mist):5 mg/m3 | |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety Glasses with side shields

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|--------------------------------------|
| General Physical Form: | Solid |
| Specific Physical Form: | Paste |
| Odor, Color, Grade: | Odorless, green, paste |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point | <i>No Data Available</i> |
| Boiling Point | <i>Not Applicable</i> |
| Flash Point | Flash point > 93 °C (200 °F) |
| Evaporation rate | <i>Not Applicable</i> |
| Flammability (solid, gas) | Not Classified |
| Flammable Limits(LEL) | <i>Not Applicable</i> |
| Flammable Limits(UEL) | <i>Not Applicable</i> |
| Vapor Pressure | <i>Not Applicable</i> |
| Vapor Density | <i>Not Applicable</i> |
| Density | Approximately 1.7 |
| Specific Gravity | Approximately 1.7 [Ref Std: WATER=1] |
| Solubility in Water | Negligible |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |

| | |
|--------------------------------|-------------------|
| Autoignition temperature | No Data Available |
| Decomposition temperature | No Data Available |
| Viscosity | No Data Available |
| Molecular weight | No Data Available |
| Volatile Organic Compounds | Not Applicable |
| Percent volatile | Not Applicable |
| VOC Less H2O & Exempt Solvents | Not Applicable |

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Amines
Strong bases
Strong oxidizing agents
Strong acids

10.6. Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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.

Carcinogenicity:

| Ingredient | CAS No. | Class Description | Regulation |
|--|-----------|--------------------------------|---|
| Generic: Mineral oils (untreated and mildly treated) | 8012-95-1 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| Generic: Mineral oils (untreated and mildly treated) | 8012-95-1 | Known human carcinogen | National Toxicology Program Carcinogens |

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|--|--------------------------------|------------------------|--|
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | Ingestion | | LD50 estimated to be > 5,000 mg/kg |
| VINYL POLYDIMETHYLSILOXANE | Dermal | Rabbit | LD50 > 15,440 mg/kg |
| VINYL POLYDIMETHYLSILOXANE | Ingestion | Rat | LD50 > 15,440 mg/kg |
| PARAFFIN OILS | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| PARAFFIN OILS | Ingestion | Rat | LD50 > 24,000 mg/kg |
| DIMETHYL METHYL HYDROGEN SILICONE FLUID | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| DIMETHYL METHYL HYDROGEN SILICONE FLUID | Ingestion | Rat | LD50 > 2,000 mg/kg |
| ALUMINUM OXIDE | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| ALUMINUM OXIDE | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 2.3 mg/l |
| ALUMINUM OXIDE | Ingestion | Rat | LD50 > 5,000 mg/kg |
| CHROMIUM OXIDE (C.I. 77288) | Dermal | Professional judgement | LD50 estimated to be > 5,000 mg/kg |
| CHROMIUM OXIDE (C.I. 77288) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.41 mg/l |
| CHROMIUM OXIDE (C.I. 77288) | Ingestion | Rat | LD50 > 5,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|---------|---------------------------|
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | | No significant irritation |
| VINYL POLYDIMETHYLSILOXANE | Rabbit | No significant irritation |

| | | |
|-----------------------------|--------|---------------------------|
| ALUMINUM OXIDE | Rabbit | No significant irritation |
| CHROMIUM OXIDE (C.I. 77288) | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-----------------------------|---------|---------------------------|
| VINYL POLYDIMETHYLSILOXANE | Rabbit | Mild irritant |
| ALUMINUM OXIDE | Rabbit | No significant irritation |
| CHROMIUM OXIDE (C.I. 77288) | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|-----------------------------|-------------------|----------------|
| CHROMIUM OXIDE (C.I. 77288) | similar compounds | Not classified |

Respiratory Sensitization

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

Germ Cell Mutagenicity

| Name | Route | Value |
|--|----------|--|
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | In vivo | Some positive data exist, but the data are not sufficient for classification |
| ALUMINUM OXIDE | In Vitro | Not mutagenic |
| CHROMIUM OXIDE (C.I. 77288) | In vivo | Not mutagenic |
| CHROMIUM OXIDE (C.I. 77288) | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|--|------------|------------------|------------------|
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | Inhalation | Human and animal | Carcinogenic |
| ALUMINUM OXIDE | Inhalation | Rat | Not carcinogenic |
| CHROMIUM OXIDE (C.I. 77288) | Ingestion | Rat | Not carcinogenic |

Reproductive Toxicity**Reproductive and/or Developmental Effects**

| Name | Route | Value | Species | Test Result | Exposure Duration |
|-----------------------------|-----------|--|---------|-----------------------|-------------------|
| CHROMIUM OXIDE (C.I. 77288) | Ingestion | Not classified for female reproduction | Rat | NOAEL 2,000 mg/kg/day | 90 days |
| CHROMIUM OXIDE (C.I. 77288) | Ingestion | Not classified for male reproduction | Rat | NOAEL 2,000 mg/kg/day | 90 days |
| CHROMIUM OXIDE (C.I. 77288) | Ingestion | Not classified for development | Rat | NOAEL 2,000 mg/kg/day | 90 days |

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-----------------------------|------------|--------------------|----------------|---------|-------------|-------------------|
| CHROMIUM OXIDE (C.I. 77288) | Inhalation | respiratory system | Not classified | Rat | NOAEL 40 mg | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure |
|------|-------|-----------------|-------|---------|-------------|----------|
|------|-------|-----------------|-------|---------|-------------|----------|

| | | | | | | Duration |
|--|------------|---|--|-------|---------------------|-----------------------|
| Quartz (14808-60-7), surface modified with silsesquioxanes, methyl, ethoxy-terminated (CAS 104780-78-1), bulk material | Inhalation | silicosis | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| ALUMINUM OXIDE | Inhalation | pneumoconiosis | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| ALUMINUM OXIDE | Inhalation | pulmonary fibrosis | Not classified | Human | NOAEL Not available | occupational exposure |
| CHROMIUM OXIDE (C.I. 77288) | Inhalation | immune system respiratory system hematopoietic system liver kidney and/or bladder | Not classified | Rat | NOAEL 44 mg/m3 | 90 days |

Aspiration Hazard

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

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

SECTION 12: Ecological information**Ecotoxicological information**

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

Chemical fate information

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

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

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration 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.

EPCRA 311/312 Hazard Classifications:**Physical Hazards**

Not applicable

Health Hazards

Not applicable

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

| <u>Ingredient</u> | <u>C.A.S. No</u> | <u>% by Wt</u> |
|---|-------------------------|-----------------------|
| ALUMINUM OXIDE | 1344-28-1 | Trade Secret < 2 |
| ALUMINUM OXIDE (ALUMINUM OXIDE (FIBROUS FORMS ONLY)) | 1344-28-1 | < 2 |

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**SECTION 16: Other information****NFPA Hazard Classification****Health:** 0 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

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

| | | | |
|------------------------|-----------|-------------------------|----------|
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