

Safety Data Sheet

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Document Group: 43-5642-4 Version Number: 1.00

Issue Date: 04/05/22 **Supercedes Date:** Initial Issue

Product identifier

3M[™] Impregum[™] Penta[™] Soft Quick Step Medium Body IntroKit (P31771)

ID Number(s):

UU-0104-3640-8

7100215412

Recommended use

Dental Product, Impression Material

Restrictions on use

For use only by dental professionals in approved indications.

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)

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:

35-4551-4, 42-9767-7, 42-9574-7

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 1.07

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 04/06/22
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 09/24/19

SECTION 1: Identification

1.1. Product identifier

3MTM Polyether Adhesive - New Formulation

Product Identification Numbers

LE-F100-1876-7, 70-2011-4439-4, UU-0098-0601-7 7100059325, 7100196367

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Tray Adhesive

Restrictions on use

For use only by dental professionals.

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Oral Care Solutions Division

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

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

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

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

2.1. Hazard classification

Flammable Liquid: Category 2.

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

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark |

Pictograms



Hazard Statements

Highly flammable liquid and vapor.

May cause drowsiness or dizziness.

Precautionary Statements

Prevention:

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

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

Use only in a well-ventilated area.

Wear protective gloves and eye/face protection.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Call a POISON CENTER or doctor/physician if you feel unwell.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.

Keep container tightly closed.

Disposal:

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

SECTION 3: Composition/information on ingredients

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

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

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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

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

Eve Contact:

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

If Swallowed:

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Contain spill. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|---------------|------------|--------|-------------------------|----------------------------|
| ETHYL ACETATE | 141-78-6 | ACGIH | TWA:400 ppm | |
| ETHYL ACETATE | 141-78-6 | OSHA | TWA:1400 mg/m3(400 ppm) | |

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

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

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

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety Glasses with side shields

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

3MTM Polyether Adhesive - New Formulation 04/06/22

Appearance

Physical stateLiquidColorRed

Specific Physical Form: Viscous

Odor Characteristic Organic solvent

Odor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data Available

Boiling Point 169 °F

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

Evaporation rateNo Data AvailableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)1.2 %Flammable Limits(UEL)11.5 %Vapor Pressure131 mmHg

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

Solubility in Water Nil

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data AvailableViscosityApproximately 0.25 Pa-sMolecular weightNo Data AvailablePercent volatileNo Data Available

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Sparks and/or flames

Heat

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Substance Condition

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

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.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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

May cause additional health effects (see below).

Skin Contact:

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

Eve Contact:

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

Ingestion:

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

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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

Toxicological Data

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

Acute Toxicity

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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---------------|---------|--------------------|
| ETHYL ACETATE | Rabbit | Minimal irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---------------|---------|---------------|
| ETHYL ACETATE | Rabbit | Mild irritant |

Skin Sensitization

| Name | Species | Value |
|---------------|---------|----------------|
| ETHYL ACETATE | Guinea | Not classified |
| | pig | |

Respiratory Sensitization

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

Germ Cell Mutagenicity

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

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

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

Aspiration Hazard

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

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Incinerate in a permitted waste incineration facility.

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

SECTION 14: Transport Information

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

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

Health Hazards

Specific target organ toxicity (single or repeated exposure)

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

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

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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3MTM Polyether Adhesive - New Formulation 04/06/22

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

SECTION 16: Other information

NFPA Hazard Classification

Health: 1 Flammability: 3 Instability: 0 Special Hazards: None

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

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SECTION 1: Identification

1.1. Product identifier

3MTM ImpregumTM PentaTM Soft Quick Step Medium Body Base Paste

Product Identification Numbers

LE-F100-3304-5

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression Material

Restrictions on use

For use only by dental professionals in approved indications.

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Oral Care Solutions Division

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

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

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

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

2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2B.

Skin Sensitizer: Category 1A.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms



Hazard Statements

Causes eye irritation.

May cause an allergic skin reaction.

Precautionary Statements

Prevention:

Wear protective gloves.

Wash thoroughly after handling.

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

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water.

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

Wash contaminated clothing before reuse.

Disposal:

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

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|--------------|------------------------|
| Furan, tetrahydro-, polymer with oxirane, bis[[3-(1-aziridinyl)butyl]carbamate] | 110531-92-5 | 40 - 60 Trade Secret * |
| Fatty acids, C8-10, diesters with 1,4:3,6-dianhydro-D- | 1215036-04-6 | 1 - 20 Trade Secret * |
| glucitol | | |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | 68855-54-9 | 1 - 20 Trade Secret * |
| Glycerides, C14-18 | 67701-27-3 | 10 - 20 Trade Secret * |
| N-ETHYL-P-TOLUENESULFONAMIDE | 80-39-7 | < 5 Trade Secret * |
| 1-DODECYLIMIDAZOLE | 4303-67-7 | < 1 Trade Secret * |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | 6485-40-1 | < 0.2 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:

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

Eye Contact:

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

If Swallowed:

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

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

Allergic skin reaction (redness, swelling, blistering, and itching).

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

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should

20 not eat, arms of shock when asing this product. Wash thoroughly after handling. Contaminated work crouning should

not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove.

7.2. Conditions for safe storage including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|-------------------------|------------|--------|----------------------------------|----------------------------|
| DUST, INERT OR NUISANCE | 68855-54-9 | OSHA | TWA(as total dust):15 | |
| | | | mg/m3;TWA(as total dust):50 | |
| | | | millions of particles/cu. ft.(15 | |
| | | | mg/m3);TWA(respirable | |
| | | | fraction):5 | |
| | | | mg/m3;TWA(respirable | |
| | | | fraction):15 millions of | |
| | | | particles/cu. ft.(5 mg/m3) | |
| SILICA, AMORPHOUS | 68855-54-9 | OSHA | TWA:20 millions of | |
| | | | particles/cu. ft.;TWA | |
| | | | concentration:0.8 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

Appearance

Physical state Solid Color Blue

Specific Physical Form: Paste

OdorCharacteristic OdorOdor thresholdNo Data AvailablepHNo Data AvailableMelting pointNot ApplicableBoiling PointNot Applicable

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

Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot ApplicableVapor DensityNot ApplicableDensity1 - 1.2 g/cm3

Specific Gravity > 1 [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 **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 is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Strong acids Strong bases Strong oxidizing agents

10.6. Hazardous decomposition products

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

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eve Contact:

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

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.

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|---|-----------|-----------------------------------|--|
| Overall product | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Furan, tetrahydro-, polymer with oxirane, bis[[3-(1-aziridinyl)butyl]carbamate] | Dermal | Professio nal judgeme nt | LD50 Not applicable |
| Furan, tetrahydro-, polymer with oxirane, bis[[3-(1-aziridinyl)butyl]carbamate] | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Glycerides, C14-18 | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Glycerides, C14-18 | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Fatty acids, C8-10, diesters with 1,4:3,6-dianhydro-D-glucitol | Dermal | Professio nal judgeme nt | LD50 estimated to be > 5,000 mg/kg |

10

| Fatty acids, C8-10, diesters with 1,4:3,6-dianhydro-D-glucitol | Ingestion | Rat | LD50 > 2,300 mg/kg |
|--|-------------|-----------|--|
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | Dermal | Professio | LD50 estimated to be > 5,000 mg/kg |
| | | nal | |
| | | judgeme | |
| | | nt | |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | Inhalation- | Rat | LC50 > 2.7 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | Ingestion | Rat | LD50 > 2,000 mg/kg |
| N-ETHYL-P-TOLUENESULFONAMIDE | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| N-ETHYL-P-TOLUENESULFONAMIDE | Ingestion | similar | LD50 estimated to be 300 - 2,000 mg/kg |
| | | compoun | |
| | | ds | |
| 1-DODECYLIMIDAZOLE | Ingestion | Rat | LD50 641 mg/kg |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | Dermal | Rat | LD50 > 2,000 mg/kg |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | Ingestion | Rat | LD50 4,900 mg/kg |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | Inhalation- | similar | LC50 > 5.66 mg/l |
| | Dust/Mist | compoun | |
| | (4 hours) | ds | |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|----------|---------------------------|
| | | |
| Furan, tetrahydro-, polymer with oxirane, bis[[3-(1-aziridinyl)butyl]carbamate] | Rabbit | No significant irritation |
| Fatty acids, C8-10, diesters with 1,4:3,6-dianhydro-D-glucitol | Rabbit | No significant irritation |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | In vitro | No significant irritation |
| | data | |
| 1-DODECYLIMIDAZOLE | Rabbit | Mild irritant |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | Human | No significant irritation |
| | and | |
| | animal | |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|----------|---------------------------|
| | | |
| Furan, tetrahydro-, polymer with oxirane, bis[[3-(1-aziridinyl)butyl]carbamate] | Rabbit | Moderate irritant |
| Fatty acids, C8-10, diesters with 1,4:3,6-dianhydro-D-glucitol | Rabbit | Mild irritant |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | Rabbit | Mild irritant |
| 1-DODECYLIMIDAZOLE | In vitro | Severe irritant |
| | data | |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|---|----------|----------------|
| Furan, tetrahydro-, polymer with oxirane, bis[[3-(1-aziridinyl)butyl]carbamate] | Guinea | Not classified |
| | pig | |
| Fatty acids, C8-10, diesters with 1,4:3,6-dianhydro-D-glucitol | Mouse | Not classified |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | Mouse | Not classified |
| 1-DODECYLIMIDAZOLE | Mouse | Sensitizing |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | Multiple | Sensitizing |
| | animal | |
| | species | |

Respiratory Sensitization

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

Germ Cell Mutagenicity

| Route | Value |
|----------|-------------------|
| | |
| In Vitro | Not mutagenic |
| In Vitro | Not mutagenic |
| In vivo | Not mutagenic |
| | In Vitro In Vitro |

Page 7 of

| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | | Some positive data exist, but the data are not sufficient for classification |
|--|----------|--|
| 1-DODECYLIMIDAZOLE | In Vitro | Not mutagenic |
| 2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-, (R)- | In Vitro | Not mutagenic |

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

| -p | | | | | |
|--|-----------|--------------------------------|---------|-------------|-----------|
| Name | Route | Value | Species | Test Result | Exposure |
| | | | | | Duration |
| Fatty acids, C8-10, diesters with 1,4:3,6- | Ingestion | Not classified for development | Rat | NOAEL 1,000 | during |
| dianhydro-D-glucitol | | - | | mg/kg/day | gestation |
| 2-Cyclohexen-1-one, 2-methyl-5-(1- | Ingestion | Not classified for development | Rat | NOAEL 250 | during |
| methylethenyl)-, (R)- | _ | _ | | mg/kg/day | 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 |
|--|------------|--|--|---------|-----------------------------|-----------------------|
| Fatty acids, C8-10, diesters with 1,4:3,6-dianhydro-D-glucitol | Ingestion | hematopoietic system nervous system eyes kidney and/or bladder | Not classified | Rat | NOAEL 2,000 mg/kg/day | 13 weeks |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | Inhalation | silicosis | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | Ingestion | hematopoietic system eyes kidney and/or bladder | Not classified | Rat | NOAEL 3,738 mg/kg/day | 90 days |

Aspiration Hazard

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

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

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

EPA Hazardous Waste Number (RCRA): 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

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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

SECTION 16: Other information

NFPA Hazard Classification

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

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

.....

| 3M TM Impregum TM Penta TM | Soft Ouick Ste | n Medium Rody Rase Paste | 04/08/22 |
|---|----------------|------------------------------|----------|
| 3M Impregum renta | Buil Oulck Bil | D MICUIUIII DUUV DASC I ASIC | U7/U0/44 |

 Document Group:
 42-9767-7
 Version Number:
 2.00

 Issue Date:
 04/08/22
 Supercedes Date:
 04/04/22

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Safety Data Sheet

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 Document Group:
 42-9574-7
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 2.00

 Issue Date:
 04/12/22
 Supercedes Date:
 03/14/22

SECTION 1: Identification

1.1. Product identifier

3M[™] Impregum[™] Penta[™] Soft Quick Step Medium Body Catalyst

Product Identification Numbers

LE-F100-3167-8

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression Material

Restrictions on use

For use only by dental professionals in approved indications.

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Oral Care Solutions Division

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

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

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

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

2.1. Hazard classification

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

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

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms





Hazard Statements

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

Causes damage to organs through prolonged or repeated ingestion exposure: blood or blood-forming organs

May cause damage to organs through prolonged or repeated ingestion exposure: respiratory system | sensory organs |

Precautionary Statements

Prevention:

Obtain special instructions before use.

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

Wear protective gloves.

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

Wash thoroughly after handling.

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

Response:

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

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

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

Disposal:

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

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--|------------|------------------------|
| CITRIC ESTER | 77-90-7 | 30 - 50 Trade Secret * |
| SILANE TREATED SILICA | 68909-20-6 | 10 - 30 Trade Secret * |
| SULFONIUM SALT | 72140-65-9 | 10 - 30 Trade Secret * |
| Flux calcined diatomaceous earth (cristobalite 1 - <10%) | 68855-54-9 | 1 - 20 Trade Secret * |
| POLYETHYLENE-POLYPROPYLENE GLYCOL | 9003-11-6 | 1 - 10 Trade Secret * |
| 1-Naphthalenesulfonic acid, 4-hydroxy-3-[(4-sulfo-1- | 84041-67-8 | < 1 Trade Secret * |
| naphthalenyl)azo]-, aluminum salt (3:2) | | |
| Laurylmercaptobutyronitrile | 93918-85-5 | < 0.5 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:

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

Eye Contact:

No need for first aid is anticipated.

If Swallowed:

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

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

Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

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

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionIrritant Vapors or GasesDuring Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes. Use personal protective equipment (gloves, respirators, etc.) as required. A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove.

7.2. Conditions for safe storage including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|-------------------------------|------------|--------|----------------------------------|----------------------------|
| DUST, INERT OR NUISANCE | 68855-54-9 | OSHA | TWA(as total dust):15 | |
| | | | mg/m3;TWA(as total dust):50 | |
| | | | millions of particles/cu. ft.(15 | |
| | | | mg/m3);TWA(respirable | |
| | | | fraction):5 | |
| | | | mg/m3;TWA(respirable | |
| | | | fraction):15 millions of | |
| | | | particles/cu. ft.(5 mg/m3) | |
| SILICA, AMORPHOUS | 68855-54-9 | OSHA | TWA:20 millions of | |
| | | | particles/cu. ft.;TWA | |
| | | | concentration:0.8 mg/m3 | |
| SILICA, AMORPHOUS | 68909-20-6 | OSHA | TWA:20 millions of | |
| | | | particles/cu. ft.;TWA | |
| | | | concentration:0.8 mg/m3 | |
| Aluminum, insoluble compounds | 84041-67-8 | ACGIH | TWA(respirable fraction):1 | A4: Not class. as human |
| | | | mg/m3 | carcin |

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety Glasses with side shields

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid
Color Dark Red

Specific Physical Form: Paste

Odor Slight Acrid Odor threshold No Data Available рH No Data Available Melting point No Data Available **Boiling Point** Not Applicable Flash Point No flash point Not Applicable **Evaporation rate** Flammability (solid, gas) Not Classified Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable Vapor Pressure Not Applicable

Vapor Density
Not Applicable
Density
No Data Available

Specific Gravity 1.1 - 1.4 [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 **Volatile Organic Compounds** Not Applicable Percent volatile Not Applicable **VOC Less H2O & Exempt Solvents** Not Applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Strong acids
Strong bases
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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

Skin Contact

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

Eve Contact:

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

Ingestion:

May be harmful if swallowed.

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

May cause additional health effects (see below).

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

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

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

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Reproductive/Developmental Toxicity:

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

Carcinogenicity:

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

Contains a chemical or chemicals which can cause cancer.

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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

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

Serious Eye Damage/Irritation

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

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Skin Sensitization

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

Respiratory Sensitization

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

Germ Cell Mutagenicity

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

Carcinogenicity

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

Reproductive Toxicity

Reproductive and/or Developmental Effects

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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

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

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

Aspiration Hazard

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

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

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

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards

Not applicable

Health Hazards

Reproductive toxicity

Respiratory or Skin Sensitization

Specific target organ toxicity (single or repeated exposure)

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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

SECTION 16: Other information

NFPA Hazard Classification

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

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

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