



Safety Data Sheet

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|------------------------|-----------|-------------------------|----------|
| Document Group: | 19-0351-7 | Version Number: | 2.03 |
| Issue Date: | 12/11/20 | Supersedes Date: | 08/12/19 |

Product identifier

3M™ Concrete Repair Horizontal, Gray

ID Number(s):

62-2649-1222-1, 62-2649-1233-8

7000046375, 7010309745

Recommended use

Industrial use

Supplier's details

MANUFACTURER: 3M
DIVISION: Industrial Adhesives and Tapes 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:

19-0350-9, 19-0349-1

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|------------------------|-----------|-------------------------|----------|
| Document Group: | 19-0349-1 | Version Number: | 5.05 |
| Issue Date: | 04/27/21 | Supersedes Date: | 04/19/21 |

SECTION 1: Identification

1.1. Product identifier

3M™ Concrete Repair Horizontal Gray, Part B

1.2. Recommended use and restrictions on use

Recommended use

Structural adhesive

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(13)) for consumer paint or coating removal

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Industrial Adhesives and Tapes 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

2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

Skin Sensitizer: Category 1A.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms



Hazard Statements

Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary Statements

Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves and eye/face protection.
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.

Supplemental Information:

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|-------------|------------------------|
| Polyether Polyol | 9082-00-2 | 40 - 70 Trade Secret * |
| Propoxylated Trimethylolpropane | 25723-16-4 | 10 - 30 Trade Secret * |
| Tetrakis(2-hydroxypropyl)ethylenediamine | 102-60-3 | 10 - 30 Trade Secret * |
| Amorphous Silica | 68611-44-9 | 1 - 5 Trade Secret * |
| Bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate | 82919-37-7 | < 1 Trade Secret * |
| Polymeric Benzotriazole | 104810-48-2 | < 1 Trade Secret * |
| Polymeric Benzotriazole II | 104810-47-1 | < 1 Trade Secret * |
| Substituted Piperidinyl Sebacate | 41556-26-7 | < 1 Trade Secret * |
| m-Xylene-.alpha.alpha'.-diamine | 1477-55-0 | <= 0.5 Trade Secret * |
| N,N'-Ethylenebis-12-Hydroxystearamide | 123-26-2 | <= 0.5 Trade Secret * |
| Titanium Dioxide | 13463-67-7 | <= 0.5 Trade Secret * |
| Methylene Chloride | 75-09-2 | < 0.01 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:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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

Substance

Aldehydes
Carbon monoxide
Carbon dioxide
Hydrogen Chloride
Oxides of Nitrogen

Condition

During Combustion
During Combustion
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

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. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed 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

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. 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.)

7.2. Conditions for safe storage including any incompatibilities

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 |
|-----------------------------------|------------|--------|--|--------------------------------|
| Titanium Dioxide | 13463-67-7 | ACGIH | TWA:10 mg/m3 | A4: Not class. as human carcin |
| Titanium Dioxide | 13463-67-7 | OSHA | TWA(as total dust):15 mg/m3 | |
| m-Xylene- .alpha.alpha'. -diamine | 1477-55-0 | ACGIH | CEIL:0.018 ppm | Danger of cutaneous absorption |
| SILICA, AMORPHOUS | 68611-44-9 | OSHA | TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3 | |
| Methylene Chloride | 75-09-2 | ACGIH | TWA:50 ppm | A3: Confirmed animal carcin. |
| Methylene Chloride | 75-09-2 | OSHA | TWA:25 ppm;STEL:125 ppm | 29 CFR 1910.1052, SKIN |

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 general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

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:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance****Physical state**

Liquid

Color

Gray

Specific Physical Form:

Viscous

Odor

Slight Ammoniacal

Odor threshold*No Data Available***pH***Not Applicable***Melting point***No Data Available***Boiling Point**

≥400 °F

Flash Point≥290 °F [*Test Method:* Tagliabue Closed Cup]**Evaporation rate**≤1 [*Ref Std:* WATER=1]**Flammability (solid, gas)**

Not Applicable

Flammable Limits(LEL)*Not Applicable***Flammable Limits(UEL)***Not Applicable***Vapor Pressure***Not Applicable***Vapor Density**≥1 [*Ref Std:* AIR=1]**Density**

1.04 g/ml

Specific Gravity1.04 [*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**

3,200 - 5,600 centipoise

Hazardous Air Pollutants0 % weight [*Test Method:* Calculated]**Molecular weight***No Data Available***VOC Less H2O & Exempt Solvents**0 g/l [*Test Method:* calculated SCAQMD rule 443.1][*Details:* when used as intended with Part A]**VOC Less H2O & Exempt Solvents**0 g/l [*Test Method:* calculated SCAQMD rule 443.1] [*Details:* as

supplied]

VOC Less H2O & Exempt Solvents0 % [*Test Method:* calculated SCAQMD rule 443.1][*Details:* when used as intended with Part A]

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

None known.

10.5. Incompatible materials

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.

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.

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.

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

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

Carcinogenicity:

| Ingredient | CAS No. | Class Description | Regulation |
|--------------------|------------|-------------------------------|---|
| Methylene Chloride | 75-09-2 | Grp. 2A: Probable human carc. | International Agency for Research on Cancer |
| Methylene Chloride | 75-09-2 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| Methylene Chloride | 75-09-2 | Cancer hazard | OSHA Carcinogens |
| Titanium Dioxide | 13463-67-7 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

Additional Information:

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

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 |
| Polyether Polyol | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Polyether Polyol | Ingestion | Rat | LD50 > 10,000 mg/kg |
| Propoxylated Trimethylolpropane | Dermal | Rat | LD50 > 2,000 mg/kg |
| Propoxylated Trimethylolpropane | Ingestion | Rat | LD50 > 2,500 mg/kg |
| Tetrakis(2-hydroxypropyl)ethylenediamine | Dermal | Rat | LD50 > 2,000 mg/kg |
| Tetrakis(2-hydroxypropyl)ethylenediamine | Ingestion | Rat | LD50 2,890 mg/kg |
| Amorphous Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Amorphous Silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Amorphous Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| m-Xylene-.alpha.alpha'.-diamine | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| m-Xylene-.alpha.alpha'.-diamine | Inhalation-Dust/Mist (4 hours) | Rat | LC50 1.2 mg/l |
| m-Xylene-.alpha.alpha'.-diamine | Ingestion | Rat | LD50 980 mg/kg |
| Substituted PiperidinyI Sebicate | Dermal | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Substituted PiperidinyI Sebicate | Ingestion | Rat | LD50 3,125 mg/kg |
| Titanium Dioxide | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Titanium Dioxide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 6.82 mg/l |
| Titanium Dioxide | Ingestion | Rat | LD50 > 10,000 mg/kg |
| Polymeric Benzotriazole | Dermal | Rat | LD50 > 2,000 mg/kg |
| Polymeric Benzotriazole | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.8 mg/l |
| Polymeric Benzotriazole | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Polymeric Benzotriazole II | Dermal | Rat | LD50 > 2,000 mg/kg |
| Polymeric Benzotriazole II | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.8 mg/l |
| Polymeric Benzotriazole II | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebicate | Dermal | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebicate | Ingestion | Rat | LD50 3,125 mg/day |
| N,N'-Ethylenebis-12-Hydroxystearamide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.05 mg/l |
| N,N'-Ethylenebis-12-Hydroxystearamide | Ingestion | Rat | LD50 > 2,000 mg/kg |
| N,N'-Ethylenebis-12-Hydroxystearamide | Dermal | similar health hazards | LD50 Not available |
| Methylene Chloride | Dermal | Rat | LD50 > 2,000 mg/kg |
| Methylene Chloride | Inhalation-Vapor (4 | Rat | LC50 63.7 mg/l |

| | | | |
|--------------------|-----------|-----|------------------|
| | hours) | | |
| Methylene Chloride | Ingestion | Rat | LD50 1,410 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| Propoxylated Trimethylolpropane | Rabbit | No significant irritation |
| Tetrakis(2-hydroxypropyl)ethylenediamine | Rabbit | No significant irritation |
| Amorphous Silica | Rabbit | No significant irritation |
| m-Xylene-.alpha.alpha'.-diamine | Rat | Corrosive |
| Substituted PiperidinyI Sebicate | Rabbit | No significant irritation |
| Titanium Dioxide | Rabbit | No significant irritation |
| Polymeric Benzotriazole | Rabbit | No significant irritation |
| Polymeric Benzotriazole II | Rabbit | No significant irritation |
| Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebicate | Rabbit | No significant irritation |
| Methylene Chloride | Rabbit | Irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| Propoxylated Trimethylolpropane | Rabbit | Mild irritant |
| Tetrakis(2-hydroxypropyl)ethylenediamine | Rabbit | Severe irritant |
| Amorphous Silica | Rabbit | No significant irritation |
| m-Xylene-.alpha.alpha'.-diamine | Rabbit | Corrosive |
| Substituted PiperidinyI Sebicate | Rabbit | No significant irritation |
| Titanium Dioxide | Rabbit | No significant irritation |
| Polymeric Benzotriazole | Rabbit | No significant irritation |
| Polymeric Benzotriazole II | Rabbit | No significant irritation |
| Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebicate | Rabbit | No significant irritation |
| Methylene Chloride | Rabbit | Severe irritant |

Skin Sensitization

| Name | Species | Value |
|---|------------------|----------------|
| Tetrakis(2-hydroxypropyl)ethylenediamine | Guinea pig | Not classified |
| Amorphous Silica | Human and animal | Not classified |
| m-Xylene-.alpha.alpha'.-diamine | Guinea pig | Sensitizing |
| Substituted PiperidinyI Sebicate | Guinea pig | Sensitizing |
| Titanium Dioxide | Human and animal | Not classified |
| Polymeric Benzotriazole | Guinea pig | Sensitizing |
| Polymeric Benzotriazole II | Guinea pig | Sensitizing |
| Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebicate | Guinea pig | Sensitizing |
| N,N'-Ethylenebis-12-Hydroxystearamide | Guinea pig | 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 |
|--|----------|---------------|
| Tetrakis(2-hydroxypropyl)ethylenediamine | In Vitro | Not mutagenic |

| | | |
|--|----------|--|
| Amorphous Silica | In Vitro | Not mutagenic |
| m-Xylene-.alpha.alpha'.-diamine | In Vitro | Not mutagenic |
| m-Xylene-.alpha.alpha'.-diamine | In vivo | Not mutagenic |
| Substituted PiperidinyI Sebcate | In Vitro | Not mutagenic |
| Titanium Dioxide | In Vitro | Not mutagenic |
| Titanium Dioxide | In vivo | Not mutagenic |
| Polymeric Benzotriazole | In Vitro | Not mutagenic |
| Polymeric Benzotriazole | In vivo | Not mutagenic |
| Polymeric Benzotriazole II | In Vitro | Not mutagenic |
| Polymeric Benzotriazole II | In vivo | Not mutagenic |
| Bis(1,2,2,6,6-pentamethyl-4-piperidinyI) sebcate | In Vitro | Not mutagenic |
| Methylene Chloride | In vivo | Not mutagenic |
| Methylene Chloride | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|--------------------|---------------|-------------------------|--|
| Amorphous Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Titanium Dioxide | Ingestion | Multiple animal species | Not carcinogenic |
| Titanium Dioxide | Inhalation | Rat | Carcinogenic |
| Methylene Chloride | Inhalation | Multiple animal species | Carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|--|------------|--|---------|-----------------------|---------------------------|
| Tetrakis(2-hydroxypropyl)ethylenediamine | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | premat ing into lactation |
| Tetrakis(2-hydroxypropyl)ethylenediamine | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 30 days |
| Tetrakis(2-hydroxypropyl)ethylenediamine | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | premat ing into lactation |
| Amorphous Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Amorphous Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Amorphous Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| m-Xylene-.alpha.alpha'.-diamine | Ingestion | Not classified for female reproduction | Rat | NOAEL 450 mg/kg/day | 1 generation |
| m-Xylene-.alpha.alpha'.-diamine | Ingestion | Not classified for male reproduction | Rat | NOAEL 450 mg/kg | 1 generation |
| m-Xylene-.alpha.alpha'.-diamine | Ingestion | Not classified for development | Rat | NOAEL 450 mg/kg/day | 1 generation |
| Polymeric Benzotriazole | Ingestion | Not classified for female reproduction | Rat | NOAEL 100 mg/kg/day | premat ing into lactation |
| Polymeric Benzotriazole | Ingestion | Not classified for male reproduction | Rat | NOAEL 100 mg/kg/day | 115 days |
| Polymeric Benzotriazole | Ingestion | Not classified for development | Rat | NOAEL 2 mg/kg/day | premat ing into lactation |
| Polymeric Benzotriazole II | Ingestion | Not classified for female reproduction | Rat | NOAEL 100 mg/kg/day | premat ing into lactation |
| Polymeric Benzotriazole II | Ingestion | Not classified for male reproduction | Rat | NOAEL 100 mg/kg/day | 115 days |
| Polymeric Benzotriazole II | Ingestion | Not classified for development | Rat | NOAEL 2 mg/kg/day | premat ing into lactation |
| Methylene Chloride | Inhalation | Not classified for female reproduction | Rat | NOAEL 5.2 mg/l | 2 generation |

| | | | | | |
|--------------------|------------|--------------------------------------|-------------------------|----------------|------------------|
| Methylene Chloride | Inhalation | Not classified for male reproduction | Rat | NOAEL 5.2 mg/l | 2 generation |
| Methylene Chloride | Inhalation | Not classified for development | Multiple animal species | NOAEL 4.3 mg/l | during gestation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|------------|-----------------------------------|--|------------------------|---------------------|-----------------------|
| Tetrakis(2-hydroxypropyl)ethylenedia mine | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Positive | |
| m-Xylene-.alpha.alpha'.-diamine | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Not available | NOAEL Not available | |
| Methylene Chloride | Dermal | blood | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | 4 hours |
| Methylene Chloride | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | occupational exposure |
| Methylene Chloride | Inhalation | blood | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Methylene Chloride | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|------------|---|--|---------|-----------------------|-----------------------|
| Tetrakis(2-hydroxypropyl)ethylenedia mine | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 300 mg/kg/day | 30 days |
| Tetrakis(2-hydroxypropyl)ethylenedia mine | Ingestion | heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles eyes kidney and/or bladder respiratory system vascular system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 30 days |
| Amorphous Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| m-Xylene-.alpha.alpha'.-diamine | Ingestion | endocrine system blood bone marrow | Not classified | Rat | NOAEL 600 mg/kg/day | 28 days |
| Titanium Dioxide | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 0.01 mg/l | 2 years |
| Titanium Dioxide | Inhalation | pulmonary fibrosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Polymeric Benzotriazole | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL not available | 28 days |
| Polymeric Benzotriazole | Ingestion | hematopoietic system | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| Polymeric Benzotriazole | Ingestion | liver | Not classified | Rat | NOAEL 10 mg/kg/day | 28 days |
| Polymeric Benzotriazole | Ingestion | eyes | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |

| | | | | | | |
|----------------------------|------------|-----------------------|--|-------------------------|-----------------------|-----------|
| Polymeric Benzotriazole II | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL not available | 28 days |
| Polymeric Benzotriazole II | Ingestion | hematopoietic system | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| Polymeric Benzotriazole II | Ingestion | liver | Not classified | Rat | NOAEL 10 mg/kg/day | 28 days |
| Polymeric Benzotriazole II | Ingestion | eyes | Not classified | Rat | NOAEL 50 mg/kg/day | 90 days |
| Methylene Chloride | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 6.95 mg/l | 2 years |
| Methylene Chloride | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 0.17 mg/l | 2 years |
| Methylene Chloride | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | LOAEL 35 mg/l | 8 weeks |
| Methylene Chloride | Inhalation | heart | Not classified | Human | NOAEL Not available | |
| Methylene Chloride | Inhalation | immune system | Not classified | Rat | NOAEL 18 mg/l | 28 days |
| Methylene Chloride | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 1,200 mg/kg/day | 3 months |
| Methylene Chloride | Ingestion | blood | Not classified | Rat | NOAEL 249 mg/kg/day | 2 years |
| Methylene Chloride | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 1,469 mg/kg/day | 3 months |
| Methylene Chloride | Ingestion | eyes | Not classified | Rat | NOAEL 249 mg/kg/day | 104 weeks |

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. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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.

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

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

| <u>Ingredient (Category if applicable)</u> | <u>C.A.S. No</u> | <u>Regulation</u> | <u>Status</u> |
|--|------------------|---|---------------|
| Methylene Chloride | 75-09-2 | Toxic Substances Control Act (TSCA) 6 Banned or Restricted Use Chemicals | Applicable |

Additional TSCA Information

| <u>Components</u> | <u>CAS No</u> | <u>Additional Information</u> |
|--------------------|---------------|---|
| Methylene Chloride | 75-09-2 | This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal. |

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

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: 1 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.

| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 19-0349-1 | Version Number: | 5.05 |
| Issue Date: | 04/27/21 | Supersedes Date: | 04/19/21 |

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Safety Data Sheet

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|------------------------|-----------|-------------------------|----------|
| Document Group: | 19-0350-9 | Version Number: | 7.02 |
| Issue Date: | 04/27/21 | Supersedes Date: | 01/18/18 |

SECTION 1: Identification

1.1. Product identifier

3M™ Concrete Repair Horizontal Gray, Part A

1.2. Recommended use and restrictions on use

Recommended use

Structural adhesive

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(13)) for consumer paint or coating removal

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Industrial Adhesives and Tapes 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

2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

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

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

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms

**Hazard Statements**

Causes serious eye irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure:
respiratory system |

Precautionary Statements**Prevention:**

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves and eye/face protection.

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

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

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.

Take off contaminated clothing and wash it before reuse.

Get medical advice/attention if you feel unwell.

Storage:

Keep container tightly closed.

Store locked up in a well-ventilated place.

Disposal:

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

Supplemental Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|------------|------------------------|
| 4,4'-diphenylmethane diisocyanate | 101-68-8 | 35 - 53 Trade Secret * |
| diphenylmethanediisocyanate prepolymer | 68424-09-9 | 15 - 40 Trade Secret * |
| poly(diphenylmethane-4,4'-diisocyanate) | 25686-28-6 | 25 - 40 Trade Secret * |
| amorphous silica | 67762-90-7 | 1 - 5 Trade Secret * |

| | | |
|--------------------|---------|-----------------------|
| Methylene Chloride | 75-09-2 | < 0.01 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:
Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). 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

| <u>Substance</u> | <u>Condition</u> |
|-------------------------------|-------------------|
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Hydrogen Cyanide | During Combustion |
| Oxides of Nitrogen | During Combustion |
| Toxic Vapor, Gas, Particulate | 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

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. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. 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. 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

For industrial/occupational use only. Not for consumer sale or use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. 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.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases.

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 |
|-----------------------------------|------------|--------|--|------------------------------|
| 4,4'-diphenylmethane diisocyanate | 101-68-8 | ACGIH | TWA:0.005 ppm | |
| 4,4'-diphenylmethane diisocyanate | 101-68-8 | OSHA | CEIL:0.2 mg/m3(0.02 ppm) | |
| SILICA, AMORPHOUS | 67762-90-7 | OSHA | TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3 | |
| Methylene Chloride | 75-09-2 | ACGIH | TWA:50 ppm | A3: Confirmed animal carcin. |
| Methylene Chloride | 75-09-2 | OSHA | TWA:25 ppm;STEL:125 ppm | 29 CFR 1910.1052, SKIN |

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 general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

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:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Neoprene
Nitrile Rubber

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - Neoprene
Apron – Nitrile

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state

Liquid

Color

Milky White

Specific Physical Form:

Viscous

Odor

Low Odor

Odor threshold

No Data Available

pH

Not Applicable

Melting point

No Data Available

Boiling Point

≥ 400 °F

Flash Point

≥ 290 °F [*Test Method:* Tagliabue Closed Cup]

Evaporation rate

≤ 1 [*Details:* Gels with exposure to humidity.]

Flammability (solid, gas)

Not Applicable

Flammable Limits(LEL)

Not Applicable

Flammable Limits(UEL)

Not Applicable

| | |
|---|---|
| Vapor Pressure | <=0.000004 mmHg [@ 68 °F] |
| Vapor Density | >=1 [Ref.Std: AIR=1] |
| Density | 1.11 g/ml |
| Specific Gravity | 1.11 [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 | 1,250 - 2,750 centipoise |
| Hazardous Air Pollutants | < 60 % weight [Test Method: Calculated] |
| Molecular weight | No Data Available |
| VOC Less H2O & Exempt Solvents | 0 g/l [Test Method: calculated SCAQMD rule 443.1] [Details: when used as intended with Part B] |
| VOC Less H2O & Exempt Solvents | 0 % [Test Method: calculated SCAQMD rule 443.1] [Details: when used as intended with Part B] |
| VOC Less H2O & Exempt Solvents | 0 g/l [Test Method: calculated SCAQMD rule 443.1] [Details: as supplied] |

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 is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

10.5. Incompatible materials

Water
Strong acids
Strong bases

10.6. Hazardous decomposition products

Substance

None known.

Condition

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.

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.

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause additional health effects (see below).

Skin Contact:

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

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

Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

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.

Carcinogenicity:

| Ingredient | CAS No. | Class Description | Regulation |
|--------------------|---------|-------------------------------|---|
| Methylene Chloride | 75-09-2 | Grp. 2A: Probable human carc. | International Agency for Research on Cancer |
| Methylene Chloride | 75-09-2 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| Methylene Chloride | 75-09-2 | Cancer hazard | OSHA Carcinogens |

Additional Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

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 | Inhalation-Vapor(4 hr) | | No data available; calculated ATE >50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| 4,4'-diphenylmethane diisocyanate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 4,4'-diphenylmethane diisocyanate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |
| 4,4'-diphenylmethane diisocyanate | Ingestion | Rat | LD50 31,600 mg/kg |
| poly(diphenylmethane-4,4'-diisocyanate) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| poly(diphenylmethane-4,4'-diisocyanate) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |

| | | | |
|---|--------------------------------|--------|--------------------|
| poly(diphenylmethane-4,4'-diisocyanate) | Ingestion | Rat | LD50 31,600 mg/kg |
| amorphous silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| amorphous silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| amorphous silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Methylene Chloride | Dermal | Rat | LD50 > 2,000 mg/kg |
| Methylene Chloride | Inhalation-Vapor (4 hours) | Rat | LC50 63.7 mg/l |
| Methylene Chloride | Ingestion | Rat | LD50 1,410 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|-------------------------|---------------------------|
| 4,4'-diphenylmethane diisocyanate | official classification | Irritant |
| poly(diphenylmethane-4,4'-diisocyanate) | official classification | Irritant |
| amorphous silica | Rabbit | No significant irritation |
| Methylene Chloride | Rabbit | Irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|-------------------------|---------------------------|
| 4,4'-diphenylmethane diisocyanate | official classification | Severe irritant |
| poly(diphenylmethane-4,4'-diisocyanate) | official classification | Severe irritant |
| amorphous silica | Rabbit | No significant irritation |
| Methylene Chloride | Rabbit | Severe irritant |

Skin Sensitization

| Name | Species | Value |
|---|-------------------------|----------------|
| 4,4'-diphenylmethane diisocyanate | official classification | Sensitizing |
| poly(diphenylmethane-4,4'-diisocyanate) | official classification | Sensitizing |
| amorphous silica | Human and animal | Not classified |

Respiratory Sensitization

| Name | Species | Value |
|---|---------|-------------|
| 4,4'-diphenylmethane diisocyanate | Human | Sensitizing |
| poly(diphenylmethane-4,4'-diisocyanate) | Human | Sensitizing |

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|--|
| 4,4'-diphenylmethane diisocyanate | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| poly(diphenylmethane-4,4'-diisocyanate) | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| amorphous silica | In Vitro | Not mutagenic |

| | | |
|--------------------|----------|--|
| Methylene Chloride | In vivo | Not mutagenic |
| Methylene Chloride | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|---|---------------|-------------------------|--|
| 4,4'-diphenylmethane diisocyanate | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| poly(diphenylmethane-4,4'-diisocyanate) | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| amorphous silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Methylene Chloride | Inhalation | Multiple animal species | Carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|---|------------|--|-------------------------|-----------------------|----------------------|
| 4,4'-diphenylmethane diisocyanate | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| poly(diphenylmethane-4,4'-diisocyanate) | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| amorphous silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| amorphous silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| amorphous silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| Methylene Chloride | Inhalation | Not classified for female reproduction | Rat | NOAEL 5.2 mg/l | 2 generation |
| Methylene Chloride | Inhalation | Not classified for male reproduction | Rat | NOAEL 5.2 mg/l | 2 generation |
| Methylene Chloride | Inhalation | Not classified for development | Multiple animal species | NOAEL 4.3 mg/l | during gestation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|------------|-----------------------------------|--|-------------------------|---------------------|-----------------------|
| 4,4'-diphenylmethane diisocyanate | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| poly(diphenylmethane-4,4'-diisocyanate) | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| Methylene Chloride | Dermal | blood | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | 4 hours |
| Methylene Chloride | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | occupational exposure |
| Methylene Chloride | Inhalation | blood | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Methylene Chloride | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|------------|--------------------------------|--|-------------------------|-----------------------|-----------------------|
| 4,4'-diphenylmethane diisocyanate | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| poly(diphenylmethane-4,4'-diisocyanate) | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| amorphous silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Methylene Chloride | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 6.95 mg/l | 2 years |
| Methylene Chloride | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 0.17 mg/l | 2 years |
| Methylene Chloride | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | LOAEL 35 mg/l | 8 weeks |
| Methylene Chloride | Inhalation | heart | Not classified | Human | NOAEL Not available | |
| Methylene Chloride | Inhalation | immune system | Not classified | Rat | NOAEL 18 mg/l | 28 days |
| Methylene Chloride | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 1,200 mg/kg/day | 3 months |
| Methylene Chloride | Ingestion | blood | Not classified | Rat | NOAEL 249 mg/kg/day | 2 years |
| Methylene Chloride | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 1,469 mg/kg/day | 3 months |
| Methylene Chloride | Ingestion | eyes | Not classified | Rat | NOAEL 249 mg/kg/day | 104 weeks |

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. Proper destruction may require the use of additional fuel during incineration processes. 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

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

Skin Corrosion or Irritation

Specific target organ toxicity (single or repeated exposure)

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> |
|-----------------------------------|------------------|----------------------|
| 4,4'-diphenylmethane diisocyanate | 101-68-8 | Trade Secret 35 - 53 |

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

| <u>Ingredient (Category if applicable)</u> | <u>C.A.S. No</u> | <u>Regulation</u> | <u>Status</u> |
|--|------------------|---|---------------|
| Methylene Chloride | 75-09-2 | Toxic Substances Control Act (TSCA) 6 Banned or Restricted Use Chemicals | Applicable |

Additional TSCA Information

| <u>Components</u> | <u>CAS No</u> | <u>Additional Information</u> |
|--------------------|---------------|---|
| Methylene Chloride | 75-09-2 | This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal. |

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

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:** 1 **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.

| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 19-0350-9 | Version Number: | 7.02 |
| Issue Date: | 04/27/21 | Supersedes Date: | 01/18/18 |

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