



Safety Data Sheet

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SECTION 1: Identification

1.1. Product identifier

3M™ Marine Adhesive Sealant Fast Cure 5200, White; PN 06520 , 05220, 06534, 06535

Product Identification Numbers

| ID Number | UPC | ID Number | UPC |
|----------------|----------------|----------------|----------------|
| LA-D100-3132-5 | | 60-9800-4557-3 | 00051135065204 |
| 60-9800-4558-1 | 00051135052204 | 60-9800-4562-3 | |
| 62-5239-0330-0 | | 62-5239-5236-4 | |

7000000629, 7000120490, 7000120491, 7010367674, 7010309906

1.2. Recommended use and restrictions on use

Recommended use

Adhesive Sealant, Sealant

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

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

Reproductive Toxicity: Category 1B.

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

2.2. Label elements

Signal word

Danger

Symbols

Health Hazard |

Pictograms



Hazard Statements

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

May cause an allergic skin reaction.

May damage fertility or the unborn child.

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

Precautionary Statements

General:

Keep out of reach of children.

Prevention:

Obtain special instructions before use.

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

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

In case of inadequate ventilation wear respiratory protection.

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 INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

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

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.

Storage:

Store locked up.

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.

2% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|------------------|------------|------------------------|
| Urethane Polymer | 51447-37-1 | 40 - 70 Trade Secret * |
| Titanium Dioxide | 13463-67-7 | 10 - 30 Trade Secret * |

| | | |
|--|-------------|----------------------|
| Synthetic Amorphous Silica | 112945-52-5 | 1 - 5 Trade Secret * |
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | < 2.4 Trade Secret * |
| Zinc Oxide | 1314-13-2 | < 2.3 Trade Secret * |
| Alkyl Isocyanate Silane | 85702-90-5 | < 2 Trade Secret * |
| Alumina Trihydrate | 21645-51-2 | < 2 Trade Secret * |
| Carbitol Acetate | 112-15-2 | < 2 Trade Secret * |
| Fumed Silica | 7631-86-9 | 1 - 2 Trade Secret * |
| Toluene | 108-88-3 | < 1 Trade Secret * |
| Heptane | 142-82-5 | < 0.3 Trade Secret * |
| (Gamma-mercaptopropyl)trimethoxysilane | 4420-74-0 | < 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 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

Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Isocyanates
 Carbon monoxide
 Carbon dioxide
 Hydrogen Cyanide
 Oxides of Nitrogen
 Oxides of Sulfur

Condition

During Combustion
 During Combustion
 During Combustion
 During Combustion
 During Combustion
 During Combustion

Toxic Vapor, Gas, Particulate

During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

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

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

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**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. 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. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from amines.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|--------------------------------------|------------|--------|--------------------------|---|
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | ACGIH | TWA:0.005 ppm | |
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | OSHA | CEIL:0.2 mg/m3(0.02 ppm) | |
| Toluene | 108-88-3 | ACGIH | TWA:20 ppm | A4: Not class. as human carcin, Ototoxicant |

| | | | | |
|-------------------------------|-------------|-------|---|--------------------------------|
| Toluene | 108-88-3 | OSHA | TWA:200 ppm;CEIL:300 ppm | |
| SILICA, AMORPHOUS | 112945-52-5 | OSHA | TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3 | |
| Zinc Oxide | 1314-13-2 | ACGIH | TWA(respirable fraction):2 mg/m3;STEL(respirable fraction):10 mg/m3 | |
| Zinc Oxide | 1314-13-2 | OSHA | TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3;TWA(as fume):5 mg/m3 | |
| 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 | |
| Heptane | 142-82-5 | ACGIH | TWA:400 ppm;STEL:500 ppm | |
| Heptane | 142-82-5 | OSHA | TWA:2000 mg/m3(500 ppm) | |
| Aluminum, insoluble compounds | 21645-51-2 | ACGIH | TWA(respirable fraction):1 mg/m3 | A4: Not class. as human carcin |
| DUST, INERT OR NUISANCE | 21645-51-2 | 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) | |
| DUST, INERT OR NUISANCE | 7631-86-9 | 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 | 7631-86-9 | 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 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

None required.

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

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 - 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

White

Specific Physical Form:

Paste

Odor

Slight Urethane

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

No flash point

Evaporation rate*No Data Available***Flammability (solid, gas)**

Not Applicable

Flammable Limits(LEL)*Not Applicable***Flammable Limits(UEL)***Not Applicable***Vapor Pressure***No Data Available***Vapor Density***No Data Available***Density**

1.3 g/ml

Specific Gravity1.3 [*Ref Std:WATER=1*]**Solubility in Water**

Nil

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**

100,000 - 500,000 centipoise

Hazardous Air Pollutants2.6 % weight [*Test Method:Calculated*]**Molecular weight***No Data Available***Volatile Organic Compounds**38 g/l [*Test Method:tested per EPA method 24*] [*Details:EU VOC content*]**Percent volatile**

2.83 % weight

VOC Less H2O & Exempt Solvents38 g/l [*Test Method:tested per EPA method 24*]

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

Amines

Alcohols

Water

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.

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

May cause additional health effects (see below).

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.

Eye Contact:

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

Ingestion:

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

May cause additional health effects (see below).

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.

Reproductive/Developmental Toxicity:

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

Carcinogenicity:

| Ingredient | CAS No. | Class Description | Regulation |
|------------------|------------|-------------------------------|---|
| Titanium dioxide | 13463-67-7 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

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 |
| Urethane Polymer | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Urethane Polymer | Ingestion | Rat | LD50 > 5,000 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 |
| Synthetic Amorphous Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Synthetic Amorphous Silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Synthetic Amorphous Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| P,P'-Methylenebis(Phenyl Isocyanate) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.368 mg/l |
| P,P'-Methylenebis(Phenyl Isocyanate) | Ingestion | Rat | LD50 31,600 mg/kg |
| Zinc Oxide | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Zinc Oxide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.7 mg/l |
| Zinc Oxide | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Carbitol Acetate | Dermal | Rabbit | LD50 15,000 mg/kg |
| Carbitol Acetate | Ingestion | Rat | LD50 11,000 mg/kg |
| Fumed Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Fumed Silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |

| | | | |
|--|--------------------------------|--------|------------------------------------|
| Fumed Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Alumina Trihydrate | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Alumina Trihydrate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 2.3 mg/l |
| Alumina Trihydrate | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Toluene | Dermal | Rat | LD50 12,000 mg/kg |
| Toluene | Inhalation-Vapor (4 hours) | Rat | LC50 30 mg/l |
| Toluene | Ingestion | Rat | LD50 5,550 mg/kg |
| Heptane | Dermal | Rabbit | LD50 3,000 mg/kg |
| Heptane | Inhalation-Vapor (4 hours) | Rat | LC50 103 mg/l |
| Heptane | Ingestion | Rat | LD50 > 15,000 mg/kg |
| (Gamma-mercaptopropyl)trimethoxysilane | Dermal | Rabbit | LD50 2,270 mg/kg |
| (Gamma-mercaptopropyl)trimethoxysilane | Ingestion | Rat | LD50 770 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-------------------------|---------------------------|
| Titanium Dioxide | Rabbit | No significant irritation |
| Synthetic Amorphous Silica | Rabbit | No significant irritation |
| P,P'-Methylenebis(Phenyl Isocyanate) | official classification | Irritant |
| Zinc Oxide | Human and animal | No significant irritation |
| Carbitol Acetate | Human and animal | Minimal irritation |
| Fumed Silica | Rabbit | No significant irritation |
| Alumina Trihydrate | Rabbit | No significant irritation |
| Toluene | Rabbit | Irritant |
| Heptane | Human | Mild irritant |
| (Gamma-mercaptopropyl)trimethoxysilane | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|-------------------------|---------------------------|
| Titanium Dioxide | Rabbit | No significant irritation |
| Synthetic Amorphous Silica | Rabbit | No significant irritation |
| P,P'-Methylenebis(Phenyl Isocyanate) | official classification | Severe irritant |
| Zinc Oxide | Rabbit | Mild irritant |
| Carbitol Acetate | Rabbit | Severe irritant |
| Fumed Silica | Rabbit | No significant irritation |
| Alumina Trihydrate | Rabbit | No significant irritation |
| Toluene | Rabbit | Moderate irritant |
| Heptane | Professional judgement | Moderate irritant |
| (Gamma-mercaptopropyl)trimethoxysilane | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|------------------|------------------|----------------|
| Titanium Dioxide | Human and animal | Not classified |

| | | |
|--|-------------------------|----------------|
| Synthetic Amorphous Silica | Human and animal | Not classified |
| P,P'-Methylenebis(Phenyl Isocyanate) | official classification | Sensitizing |
| Zinc Oxide | Guinea pig | Not classified |
| Carbitol Acetate | Human and animal | Not classified |
| Fumed Silica | Human and animal | Not classified |
| Alumina Trihydrate | Guinea pig | Not classified |
| Toluene | Guinea pig | Not classified |
| (Gamma-mercaptopropyl)trimethoxysilane | Guinea pig | Sensitizing |

Respiratory Sensitization

| Name | Species | Value |
|--------------------------------------|---------|-------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | Human | Sensitizing |

Germ Cell Mutagenicity

| Name | Route | Value |
|--|----------|--|
| Titanium Dioxide | In Vitro | Not mutagenic |
| Titanium Dioxide | In vivo | Not mutagenic |
| Synthetic Amorphous Silica | In Vitro | Not mutagenic |
| P,P'-Methylenebis(Phenyl Isocyanate) | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Zinc Oxide | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Zinc Oxide | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Carbitol Acetate | In Vitro | Not mutagenic |
| Fumed Silica | In Vitro | Not mutagenic |
| Toluene | In Vitro | Not mutagenic |
| Toluene | In vivo | Not mutagenic |
| Heptane | In Vitro | Not mutagenic |
| (Gamma-mercaptopropyl)trimethoxysilane | In Vitro | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|--------------------------------------|---------------|-------------------------|--|
| Titanium Dioxide | Ingestion | Multiple animal species | Not carcinogenic |
| Titanium Dioxide | Inhalation | Rat | Carcinogenic |
| Synthetic Amorphous Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| Fumed Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Alumina Trihydrate | Not Specified | Multiple animal species | Not carcinogenic |
| Toluene | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Toluene | Ingestion | Rat | Some positive data exist, but the data are not sufficient for classification |

| | | | |
|---------|------------|-------|--|
| Toluene | Inhalation | Mouse | Some positive data exist, but the data are not sufficient for classification |
|---------|------------|-------|--|

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|--------------------------------------|------------|--|-------------------------|-----------------------|--------------------------------|
| Synthetic Amorphous Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Synthetic Amorphous Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Synthetic Amorphous Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesis |
| Zinc Oxide | Ingestion | Not classified for reproduction and/or development | Multiple animal species | NOAEL 125 mg/kg/day | prematuring & during gestation |
| Fumed Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Fumed Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Fumed Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| Alumina Trihydrate | Ingestion | Not classified for development | Rat | NOAEL 768 mg/kg/day | during organogenesis |
| Toluene | Inhalation | Not classified for female reproduction | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | Not classified for male reproduction | Rat | NOAEL 2.3 mg/l | 1 generation |
| Toluene | Ingestion | Toxic to development | Rat | LOAEL 520 mg/kg/day | during gestation |
| Toluene | Inhalation | Toxic to development | Human | NOAEL Not available | poisoning and/or abuse |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--------------------------------------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| Carbitol Acetate | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | not applicable |
| Carbitol Acetate | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Multiple animal species | NOAEL Not available | not applicable |
| Toluene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Toluene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Toluene | Inhalation | immune system | Not classified | Mouse | NOAEL 0.004 mg/l | 3 hours |
| Toluene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| Heptane | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |

| | | | | | | |
|---------|------------|-----------------------------------|--|-------|---------------------|--|
| Heptane | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Heptane | 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 |
|--------------------------------------|------------|--|--|-------------------------|-----------------------|------------------------|
| 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 |
| Synthetic Amorphous Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| Zinc Oxide | Ingestion | nervous system | Not classified | Rat | NOAEL 600 mg/kg/day | 10 days |
| Zinc Oxide | Ingestion | endocrine system hematopoietic system kidney and/or bladder | Not classified | Other | NOAEL 500 mg/kg/day | 6 months |
| Carbitol Acetate | Inhalation | respiratory system liver immune system kidney and/or bladder | Not classified | Rat | NOAEL 0.48 mg/l | 2 weeks |
| Fumed Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | auditory system eyes olfactory system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | nervous system | May cause damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 2.3 mg/l | 15 months |
| Toluene | Inhalation | heart liver kidney and/or bladder | Not classified | Rat | NOAEL 11.3 mg/l | 15 weeks |
| Toluene | Inhalation | endocrine system | Not classified | Rat | NOAEL 1.1 mg/l | 4 weeks |
| Toluene | Inhalation | immune system | Not classified | Mouse | NOAEL Not available | 20 days |
| Toluene | Inhalation | bone, teeth, nails, and/or hair | Not classified | Mouse | NOAEL 1.1 mg/l | 8 weeks |
| Toluene | Inhalation | hematopoietic system vascular system | Not classified | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | gastrointestinal tract | Not classified | Multiple animal species | NOAEL 11.3 mg/l | 15 weeks |
| Toluene | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 625 mg/kg/day | 13 weeks |
| Toluene | Ingestion | heart | Not classified | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | liver kidney and/or bladder | Not classified | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | hematopoietic system | Not classified | Mouse | NOAEL 600 mg/kg/day | 14 days |
| Toluene | Ingestion | endocrine system | Not classified | Mouse | NOAEL 105 mg/kg/day | 28 days |
| Toluene | Ingestion | immune system | Not classified | Mouse | NOAEL 105 | 4 weeks |

| | | | | | | |
|---------|------------|--|----------------|-----|---------------|----------|
| | | | | | mg/kg/day | |
| Heptane | Inhalation | liver nervous system kidney and/or bladder | Not classified | Rat | NOAEL 12 mg/l | 26 weeks |

Aspiration Hazard

| Name | Value |
|---------|-------------------|
| Toluene | Aspiration hazard |
| Heptane | Aspiration hazard |

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. 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): D018 (Benzene), D035 (Methyl ethyl ketone)

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)

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

| Ingredient | C.A.S. No | % by Wt |
|---|------------------|--------------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | Trade Secret < 2.4 |
| P,P'-Methylenebis(Phenyl Isocyanate) (Benzene, 1,1'-methylenebis[4-isocyanato-) | 101-68-8 | Trade Secret < 2.4 |
| P,P'-Methylenebis(Phenyl Isocyanate) (DIISOCYANATES (CERTAIN CHEMICALS ONLY)) | 101-68-8 | Trade Secret < 2.4 |
| Zinc Oxide (ZINC COMPOUNDS) | 1314-13-2 | Trade Secret < 2.3 |
| Carbitol Acetate (GLYCOL ETHERS) | 112-15-2 | Trade Secret < 2 |

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.

| | | | |
|------------------------|-----------|-------------------------|----------|
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| Issue Date: | 05/02/22 | Supersedes Date: | 10/06/21 |

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