



**3M General Offices**  
3M Center  
St. Paul, MN 55144-1000  
1-800-364-3577 or (651) 737-6501 (24 hours)

## Safety Data Sheet

2025-07-10 21:38:57.063

Purchase Order #: 278808  
Customer Number: 0016124695

SDS Coordinator  
HISCO  
6650 CONCORD PARK DR  
HOUSTON, TX 77040-4098  
USA

Dear SDS Coordinator

Enclosed is the Safety Data Sheet (SDS)\* for the product that your company recently purchased from 3M.

Please forward the attached document(s) to the individual in your organization responsible for hazard communication.

If you are a distributor and resell this product, OSHA and EPA require that you transmit this SDS information to your customers at the time of first shipment or whenever you receive revised SDSs from 3M.

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3M is committed to meeting our customer requirements. Please contact your 3M customer service or sales representative if you have any questions. If you do not know whom to contact, please call the 3M Product Information Center at 1-800-364-3577.

**If you are not currently receiving 3M SDSs by e-mail and would like to do so, please contact our eSDS Administrator at [emsdsadmin@mmm.com](mailto:emsdsadmin@mmm.com)**

\*An Article Information Sheet (AIS) or Article Information Letter (AIL) may be enclosed in place of an SDS if the product is an article which does not require an SDS under the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.



## Safety Data Sheet

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|                        |           |                         |          |
|------------------------|-----------|-------------------------|----------|
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| <b>Issue Date:</b>     | 11/13/23  | <b>Supersedes Date:</b> | 11/18/22 |

### Product identifier

3M™ Scotch-Weld™ Epoxy Adhesive DP190 Gray

### ID Number(s):

62-3553-1430-3, 62-3553-1432-9, 62-3553-1435-2, 62-3553-1436-0, 62-3553-1437-8, 62-3553-1438-6, 62-3553-1439-4, 62-3553-3530-8, 62-3553-3830-2

7010366135, 7100077115, 7100076722, 7000121314, 7010366136, 7010409744, 7010410438, 7100216772

### Recommended use

Structural adhesive

### Supplier's details

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>MANUFACTURER:</b> | 3M                                      |
| <b>DIVISION:</b>     | Industrial Adhesives and Tapes Division |
| <b>ADDRESS:</b>      | 3M Center, St. Paul, MN 55144-1000, USA |
| <b>Telephone:</b>    | 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:**

10-3348-9, 10-3349-7

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**Document Group:** 10-3348-9  
**Issue Date:** 07/01/25

**Version Number:** 33.04  
**Supersedes Date:** 11/13/23

### SECTION 1: Identification

#### 1.1. Product identifier

3M(TM) Scotch-Weld(TM) Epoxy Adhesive DP190 Gray, Part B

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Structural adhesive

#### 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 2B.

Skin Sensitizer: Category 1.

#### 2.2. Label elements

##### Signal word

Warning

##### Symbols

Exclamation mark |

##### Pictograms



##### Hazard Statements

Causes eye irritation.  
May cause an allergic skin reaction.

### Precautionary Statements

#### Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wear protective gloves.  
Wash thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.

#### Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.

#### Disposal:

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

## SECTION 3: Composition/information on ingredients

| Ingredient       | C.A.S. No. | % by Wt                |
|------------------|------------|------------------------|
| Epoxy Resin      | 25068-38-6 | 70 - 90 Trade Secret * |
| Kaolin           | 1332-58-7  | 10 - 30 Trade Secret * |
| titanium Dioxide | 13463-67-7 | < 1 Trade Secret *     |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

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

#### Skin Contact:

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

#### Eye Contact:

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

#### If Swallowed:

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

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

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

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

Not applicable

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

| <u>Substance</u>  | <u>Condition</u>  |
|-------------------|-------------------|
| Aldehydes         | During Combustion |
| Carbon monoxide   | During Combustion |
| Carbon dioxide    | During Combustion |
| Hydrogen Chloride | During Combustion |
| Ketones           | 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

Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. 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.

### 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.

| <b>Ingredient</b>       | <b>C.A.S. No.</b> | <b>Agency</b> | <b>Limit type</b>                                                                                                                                          | <b>Additional Comments</b>     |
|-------------------------|-------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| DUST, INERT OR NUISANCE | 1332-58-7         | OSHA          | TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m <sup>3</sup> );TWA(respirable fraction):15 millions of particles/cu. ft.(5 mg/m <sup>3</sup> ) |                                |
| Kaolin                  | 1332-58-7         | ACGIH         | TWA(respirable fraction):2 mg/m <sup>3</sup>                                                                                                               | A4: Not class. as human carcin |
| KAOLIN, TOTAL DUST      | 1332-58-7         | OSHA          | TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>                                                                      |                                |
| titanium Dioxide        | 13463-67-7        | ACGIH         | TWA(Respirable nanoscale particles):0.2 mg/m <sup>3</sup> ;TWA(Respirable finescale particles):2.5 mg/m <sup>3</sup>                                       | A3: Confirmed animal carcin.   |
| titanium Dioxide        | 13463-67-7        | OSHA          | TWA(as total dust):15 mg/m <sup>3</sup>                                                                                                                    |                                |

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:

Safety Glasses with side shields

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

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

Half facepiece or full facepiece supplied-air respirator

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:

Viscous

#### Odor

Mild Epoxy

#### Odor threshold

No Data Available

#### pH

Not Applicable

#### Melting point

Not Applicable

#### Boiling Point

Not Applicable

#### Flash Point

>=248 °C [Test Method:Pensky-Martens Closed Cup]

#### Evaporation rate

Not Applicable

#### Flammability (solid, gas)

Not Applicable

#### Flammable Limits(LEL)

Not Applicable

#### Flammable Limits(UEL)

Not Applicable

#### Vapor Pressure

<=0.1 mmHg [@ 25 °C]

#### Vapor Density

Not Applicable

#### Density

1.33 g/ml

#### Specific Gravity

1.33 [Ref Std:WATER=1]

#### Solubility in Water

Nil

#### Solubility- non-water

No Data Available

#### Partition coefficient: n-octanol/ water

No Data Available

#### Autoignition temperature

Not Applicable

#### Decomposition temperature

No Data Available

#### Viscosity

100,000 centipoise

#### Hazardous Air Pollutants

0 % weight [Test Method:Calculated]

#### Molecular weight

No Data Available

#### VOC Less H2O & Exempt Solvents

< 5 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 Solvents

< 0.5 % [Test Method:calculated SCAQMD rule 443.1]  
[Details:when used as intended with Part B]

## 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**

Strong acids

Strong oxidizing agents

**10.6. Hazardous decomposition products****Substance****Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

**SECTION 11: Toxicological information**

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

**11.1. Information on Toxicological effects****Signs and Symptoms of Exposure**

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

**Inhalation:**

No health effects are expected.

**Skin Contact:**

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:**

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

**Ingestion:**

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

**Carcinogenicity:**

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

**Toxicological Data**

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

### Acute Toxicity

| Name             | Route                          | Species | Value                                          |
|------------------|--------------------------------|---------|------------------------------------------------|
| Overall product  | Ingestion                      |         | No data available; calculated ATE >5,000 mg/kg |
| Epoxy Resin      | Dermal                         | Rat     | LD50 > 1,600 mg/kg                             |
| Epoxy Resin      | Ingestion                      | Rat     | LD50 > 1,000 mg/kg                             |
| Kaolin           | Dermal                         |         | LD50 estimated to be > 5,000 mg/kg             |
| Kaolin           | Ingestion                      | Human   | LD50 > 15,000 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                            |

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

| Name             | Species                | Value                     |
|------------------|------------------------|---------------------------|
| Epoxy Resin      | Rabbit                 | Mild irritant             |
| Kaolin           | Professional judgement | No significant irritation |
| titanium Dioxide | Rabbit                 | No significant irritation |

### Serious Eye Damage/Irritation

| Name             | Species                | Value                     |
|------------------|------------------------|---------------------------|
| Epoxy Resin      | Rabbit                 | Moderate irritant         |
| Kaolin           | Professional judgement | No significant irritation |
| titanium Dioxide | Rabbit                 | No significant irritation |

### Skin Sensitization

| Name             | Species          | Value          |
|------------------|------------------|----------------|
| Epoxy Resin      | Human and animal | Sensitizing    |
| titanium Dioxide | Human and animal | Not classified |

### Respiratory Sensitization

| Name        | Species | Value          |
|-------------|---------|----------------|
| Epoxy Resin | Human   | Not classified |

### Germ Cell Mutagenicity

| Name             | Route    | Value                                                                        |
|------------------|----------|------------------------------------------------------------------------------|
| Epoxy Resin      | In vivo  | Not mutagenic                                                                |
| Epoxy Resin      | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| titanium Dioxide | In Vitro | Not mutagenic                                                                |
| titanium Dioxide | In vivo  | Not mutagenic                                                                |

### Carcinogenicity

| Name             | Route      | Species                 | Value                                                                        |
|------------------|------------|-------------------------|------------------------------------------------------------------------------|
| Epoxy Resin      | Dermal     | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Kaolin           | Inhalation | Multiple animal species | Not carcinogenic                                                             |
| titanium Dioxide | Ingestion  | Multiple animal species | Not carcinogenic                                                             |
| titanium Dioxide | Inhalation | Rat                     | Carcinogenic                                                                 |

## Reproductive Toxicity

### Reproductive and/or Developmental Effects

| Name        | Route     | Value                                  | Species | Test Result         | Exposure Duration    |
|-------------|-----------|----------------------------------------|---------|---------------------|----------------------|
| Epoxy Resin | Ingestion | Not classified for female reproduction | Rat     | NOAEL 750 mg/kg/day | 2 generation         |
| Epoxy Resin | Ingestion | Not classified for male reproduction   | Rat     | NOAEL 750 mg/kg/day | 2 generation         |
| Epoxy Resin | Dermal    | Not classified for development         | Rabbit  | NOAEL 300 mg/kg/day | during organogenesis |
| Epoxy Resin | Ingestion | Not classified for development         | Rat     | NOAEL 750 mg/kg/day | 2 generation         |

## Target Organ(s)

### Specific Target Organ Toxicity - single exposure

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

### Specific Target Organ Toxicity - repeated exposure

| Name             | Route      | Target Organ(s)                                                                                          | Value                                                                        | Species | Test Result           | Exposure Duration     |
|------------------|------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------|-----------------------|-----------------------|
| Epoxy Resin      | Dermal     | liver                                                                                                    | Not classified                                                               | Rat     | NOAEL 1,000 mg/kg/day | 2 years               |
| Epoxy Resin      | Dermal     | nervous system                                                                                           | Not classified                                                               | Rat     | NOAEL 1,000 mg/kg/day | 13 weeks              |
| Epoxy Resin      | Ingestion  | auditory system   heart   endocrine system   hematopoietic system   liver   eyes   kidney and/or bladder | Not classified                                                               | Rat     | NOAEL 1,000 mg/kg/day | 28 days               |
| Kaolin           | Inhalation | pneumoconiosis                                                                                           | Causes damage to organs through prolonged or repeated exposure               | Human   | NOAEL NA              | occupational exposure |
| Kaolin           | Inhalation | pulmonary fibrosis                                                                                       | Not classified                                                               | Rat     | NOAEL Not available   |                       |
| 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 |

## 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.

**EPA Hazardous Waste Number (RCRA):** Not regulated

## SECTION 14: Transport Information

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

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### EPCRA 311/312 Hazard Classifications:

##### Physical Hazards

Not applicable

##### Health Hazards

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

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:** 0 **Special Hazards:** None

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

**Document Group:** 10-3348-9  
**Issue Date:** 07/01/25

**Version Number:** 33.04  
**Supersedes Date:** 11/13/23

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| <b>Issue Date:</b>     | 11/18/22  | <b>Supersedes Date:</b> | 03/08/22 |

### SECTION 1: Identification

#### 1.1. Product identifier

3M(TM) Scotch-Weld(TM) Epoxy Adhesive DP190 Gray, Part A

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Structural adhesive

#### 1.3. Supplier's details

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>MANUFACTURER:</b> | 3M                                      |
| <b>DIVISION:</b>     | Industrial Adhesives and Tapes Division |
| <b>ADDRESS:</b>      | 3M Center, St. Paul, MN 55144-1000, USA |
| <b>Telephone:</b>    | 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.

Skin Sensitizer: Category 1A.

Reproductive Toxicity: Category 1B.

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

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Exclamation mark | Health Hazard |

##### Pictograms

**Hazard Statements**

Causes serious eye irritation.  
 Causes skin irritation.  
 May cause an allergic skin reaction.  
 May cause drowsiness or dizziness.  
 May damage fertility or the unborn child.

**Precautionary Statements****Prevention:**

Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves and eye/face protection.  
 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 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.  
 IF exposed or concerned: Get medical advice/attention.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.  
 Store locked up.

**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                |
|-------------------------------------|------------|------------------------|
| Aliphatic Polymer Diamine           | 68911-25-1 | 45 - 65 Trade Secret * |
| Kaolin                              | 1332-58-7  | 20 - 40 Trade Secret * |
| 4,7,10-Trioxatridecane-1,13-Diamine | 4246-51-9  | < 5 Trade Secret *     |
| Titanium Dioxide                    | 13463-67-7 | < 1 Trade Secret *     |
| Toluene                             | 108-88-3   | < 0.5 Trade Secret *   |

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade

secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

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

#### Skin Contact:

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

#### Eye Contact:

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). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

### 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

Amine Compounds

Carbon monoxide

Carbon dioxide

Oxides of Nitrogen

Toxic Vapor, Gas, Particulate

#### 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. 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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. 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                         |
|-------------------------|------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 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                                                                                                                                                                                                                          |                                             |
| DUST, INERT OR NUISANCE | 1332-58-7  | OSHA   | TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(as total dust):50 millions of particles/cu. ft.(15 mg/m <sup>3</sup> );TWA(respirable fraction):5 mg/m <sup>3</sup> ;TWA(respirable fraction):15 millions of particles/cu. ft.(5 mg/m <sup>3</sup> ) |                                             |
| Kaolin                  | 1332-58-7  | ACGIH  | TWA(respirable fraction):2 mg/m <sup>3</sup>                                                                                                                                                                                                      | A4: Not class. as human carcin              |
| KAOLIN, TOTAL DUST      | 1332-58-7  | OSHA   | TWA(as total dust):15 mg/m <sup>3</sup> ;TWA(respirable fraction):5 mg/m <sup>3</sup>                                                                                                                                                             |                                             |
| Titanium Dioxide        | 13463-67-7 | ACGIH  | TWA:10 mg/m <sup>3</sup>                                                                                                                                                                                                                          | A4: Not class. as human carcin              |
| Titanium Dioxide        | 13463-67-7 | OSHA   | TWA(as total dust):15 mg/m <sup>3</sup>                                                                                                                                                                                                           |                                             |

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:

Safety Glasses with side shields  
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

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

Gray

Specific Physical Form:

Viscous Liquid

Odor

Amine

Odor threshold

No Data Available

pH

Not Applicable

Melting point

Not Applicable

Boiling Point

>=250 °F

Flash Point

>=94 °C [Test Method: Closed Cup]

Evaporation rate

Negligible

Flammability (solid, gas)

Not Applicable

|                                         |                                                                                                   |
|-----------------------------------------|---------------------------------------------------------------------------------------------------|
| Flammable Limits(LEL)                   | No Data Available                                                                                 |
| Flammable Limits(UEL)                   | No Data Available                                                                                 |
| Vapor Pressure                          | <=0.1 mmHg [@ 25 °C]                                                                              |
| Vapor Density                           | Not Applicable                                                                                    |
| Density                                 | 1.26 g/ml [@ 20 °C]                                                                               |
| Specific Gravity                        | 1.26 [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                               | 40,000 - 65,000 centipoise [@ 75 °F ] [Test Method:Brookfield]                                    |
| Hazardous Air Pollutants                | < 0 % weight [Test Method:Calculated]                                                             |
| Molecular weight                        | No Data Available                                                                                 |
| VOC Less H2O & Exempt Solvents          | < 5 g/l [Test Method:calculated SCAQMD rule 443.1]<br>[Details:when used as intended with Part B] |
| VOC Less H2O & Exempt Solvents          | < 7 g/l [Test Method:calculated SCAQMD rule 443.1]<br>[Details:as supplied]                       |
| VOC Less H2O & Exempt Solvents          | < 0.5 % [Test Method:calculated SCAQMD rule 443.1]<br>[Details:when used as intended with Part B] |

## 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

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.

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:

May be harmful if swallowed.

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

May cause additional health effects (see below).

## Additional Health Effects:

### Single exposure may cause target organ effects:

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

### 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 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 >2,000 - =5,000 mg/kg |
| Aliphatic Polymer Diamine           | Dermal    | Rat     | LD50 > 2,000 mg/kg                                      |
| Aliphatic Polymer Diamine           | Ingestion | Rat     | LD50 > 2,000 mg/kg                                      |
| Kaolin                              | Dermal    |         | LD50 estimated to be > 5,000 mg/kg                      |
| Kaolin                              | Ingestion | Human   | LD50 > 15,000 mg/kg                                     |
| 4,7,10-Trioxatridecane-1,13-Diamine | Dermal    | Rabbit  | LD50 2,525 mg/kg                                        |
| 4,7,10-Trioxatridecane-1,13-Diamine | Ingestion | Rat     | LD50 2,850 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 |
| 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    |

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

| Name                                | Species                | Value                     |
|-------------------------------------|------------------------|---------------------------|
| Aliphatic Polymer Diamine           | Rat                    | Irritant                  |
| Kaolin                              | Professional judgement | No significant irritation |
| 4,7,10-Trioxatridecane-1,13-Diamine | Rabbit                 | Corrosive                 |
| Titanium Dioxide                    | Rabbit                 | No significant irritation |
| Toluene                             | Rabbit                 | Irritant                  |

### Serious Eye Damage/Irritation

| Name                                | Species                | Value                     |
|-------------------------------------|------------------------|---------------------------|
| Aliphatic Polymer Diamine           | In vitro data          | Severe irritant           |
| Kaolin                              | Professional judgement | No significant irritation |
| 4,7,10-Trioxatridecane-1,13-Diamine | Rabbit                 | Corrosive                 |
| Titanium Dioxide                    | Rabbit                 | No significant irritation |
| Toluene                             | Rabbit                 | Moderate irritant         |

### Skin Sensitization

| Name                                | Species                | Value          |
|-------------------------------------|------------------------|----------------|
| Aliphatic Polymer Diamine           | Guinea pig             | Sensitizing    |
| 4,7,10-Trioxatridecane-1,13-Diamine | Professional judgement | Sensitizing    |
| Titanium Dioxide                    | Human and animal       | Not classified |
| Toluene                             | Guinea pig             | Not classified |

### Respiratory Sensitization

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

### Germ Cell Mutagenicity

| Name                                | Route    | Value         |
|-------------------------------------|----------|---------------|
| Aliphatic Polymer Diamine           | In Vitro | Not mutagenic |
| 4,7,10-Trioxatridecane-1,13-Diamine | In Vitro | Not mutagenic |
| Titanium Dioxide                    | In Vitro | Not mutagenic |
| Titanium Dioxide                    | In vivo  | Not mutagenic |
| Toluene                             | In Vitro | Not mutagenic |
| Toluene                             | In vivo  | Not mutagenic |

**Carcinogenicity**

| Name             | Route      | Species                 | Value                                                                        |
|------------------|------------|-------------------------|------------------------------------------------------------------------------|
| Kaolin           | Inhalation | Multiple animal species | Not carcinogenic                                                             |
| Titanium Dioxide | Ingestion  | Multiple animal species | Not carcinogenic                                                             |
| Titanium Dioxide | Inhalation | Rat                     | 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        |
|-------------------------------------|------------|----------------------------------------|---------|-----------------------|--------------------------|
| Aliphatic Polymer Diamine           | Ingestion  | Not classified for female reproduction | Rat     | NOAEL 1,000 mg/kg/day | premating into lactation |
| Aliphatic Polymer Diamine           | Ingestion  | Not classified for male reproduction   | Rat     | NOAEL 1,000 mg/kg/day | 29 days                  |
| Aliphatic Polymer Diamine           | Ingestion  | Not classified for development         | Rat     | NOAEL 1,000 mg/kg/day | premating into lactation |
| 4,7,10-Trioxatridecane-1,13-Diamine | Ingestion  | Not classified for female reproduction | Rat     | NOAEL 600 mg/kg/day   | premating into lactation |
| 4,7,10-Trioxatridecane-1,13-Diamine | Ingestion  | Not classified for male reproduction   | Rat     | NOAEL 600 mg/kg/day   | 59 days                  |
| 4,7,10-Trioxatridecane-1,13-Diamine | Ingestion  | Not classified for development         | Rat     | NOAEL 600 mg/kg/day   | premating into lactation |
| 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 |
|-------------------------------------|------------|-----------------------------------|------------------------------------------------------------------------------|------------------------|---------------------|-------------------|
| Aliphatic Polymer Diamine           | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | similar health hazards | Irritation Positive |                   |
| Aliphatic Polymer Diamine           | Ingestion  | central nervous system depression | May cause drowsiness or dizziness                                            | Rat                    | NOAEL Not available |                   |
| 4,7,10-Trioxatridecane-1,13-Diamine | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available |                   |
| 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                   | May cause drowsiness or                                                      | Human                  | NOAEL Not           | poisoning         |

|  |  |                   |           |  |           |              |
|--|--|-------------------|-----------|--|-----------|--------------|
|  |  | system depression | dizziness |  | available | and/or abuse |
|--|--|-------------------|-----------|--|-----------|--------------|

**Specific Target Organ Toxicity - repeated exposure**

| Name                                | Route      | Target Organ(s)                                                                                                                                                                                                                            | Value                                                                        | Species                 | Test Result           | Exposure Duration      |
|-------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------|-----------------------|------------------------|
| Aliphatic Polymer Diamine           | Ingestion  | heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system | Not classified                                                               | Rat                     | NOAEL 1,000 mg/kg/day | 29 days                |
| Kaolin                              | Inhalation | pneumoconiosis                                                                                                                                                                                                                             | Causes damage to organs through prolonged or repeated exposure               | Human                   | NOAEL NA              | occupational exposure  |
| Kaolin                              | Inhalation | pulmonary fibrosis                                                                                                                                                                                                                         | Not classified                                                               | Rat                     | NOAEL Not available   |                        |
| 4,7,10-Trioxatridecane-1,13-Diamine | Ingestion  | gastrointestinal tract   heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system        | Not classified                                                               | Rat                     | NOAEL 600 mg/kg/day   | 59 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  |
| 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 though 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<br>2,500<br>mg/kg/day | 13 weeks |
| Toluene | Ingestion | liver   kidney and/or<br>bladder | Not classified | Multiple<br>animal<br>species | NOAEL<br>2,500<br>mg/kg/day | 13 weeks |
| Toluene | Ingestion | hematopoietic<br>system          | Not classified | Mouse                         | NOAEL 600<br>mg/kg/day      | 14 days  |
| Toluene | Ingestion | endocrine system                 | Not classified | Mouse                         | NOAEL 105<br>mg/kg/day      | 28 days  |
| Toluene | Ingestion | immune system                    | Not classified | Mouse                         | NOAEL 105<br>mg/kg/day      | 4 weeks  |

**Aspiration Hazard**

| Name    | Value             |
|---------|-------------------|
| Toluene | 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)

**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

Serious eye damage or eye irritation

Skin Corrosion or Irritation

Specific target organ toxicity (single or repeated exposure)

**15.2. State Regulations**

Contact 3M for more information.

**15.3. Chemical Inventories**

The components of this product are in compliance with the 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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