



Safety Data Sheet

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|------------------------|-----------|-------------------------|----------|
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SECTION 1: Identification

1.1. Product identifier

3M™ Scotchkote™ Fusion Bonded Epoxy Coating 135

Product Identification Numbers

| ID Number | UPC | ID Number | UPC |
|----------------|------------------|-----------|-----|
| 80-0080-0774-4 | 00-54007-09080-9 | | |
| 7100025954 | | | |

1.2. Recommended use and restrictions on use

Recommended use

Coating, Fusion Bonded Epoxy Coating for Metal

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Electrical Markets 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

Combustible Dust.

Serious Eye Damage/Irritation: Category 2B.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 1A.

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

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms**Hazard Statements**

May form combustible dust concentrations in air.

Causes eye irritation.

May cause an allergic skin reaction.

May cause cancer.

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

Precautionary Statements**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.

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 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.

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.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--|------------|-------------------------|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | 25036-25-3 | 45 - 70 Trade Secret * |
| Mica-Group Minerals | 12001-26-2 | 25 - 35 Trade Secret * |
| Quartz Silica | 14808-60-7 | 0.1 - 15 Trade Secret * |
| Dicyandiamide | 461-58-5 | 1 - 5 Trade Secret * |
| Feldspars | 68476-25-5 | 0.1 - 5 Trade Secret * |
| Titanium Dioxide | 13463-67-7 | 1 - 5 Trade Secret * |
| 4,4'-ISOPROPYLIDENEDIPHENOL | 80-05-7 | < 0.1 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). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Powdered material may form explosive dust-air mixture. Avoid fire fighting methods that would cause powders to become airborne.

Hazardous Decomposition or By-Products

| <u>Substance</u> | <u>Condition</u> |
|----------------------|-------------------|
| Aldehydes | During Combustion |
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Oxides of Nitrogen | During Combustion |
| Oxides of Phosphorus | 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. Eliminate all ignition sources if safe to do so. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene

practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Use wet sweeping compound or water to avoid dusting. Sweep up. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not 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. Wash contaminated clothing before reuse. Use personal protective equipment (gloves, respirators, etc.) as required. Dust clouds of this material in sufficient concentration in combination with an ignition source may be explosive. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions. Routine housekeeping should be instituted to ensure that combustible dusts do not accumulate on surfaces. Solids can generate static electricity charges when transferred and in mixing operations sufficient to be an ignition source. Evaluate the need for precautions, such as grounding and bonding, low energy transfer of material (e.g. low speed, short distance), or inert atmospheres.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

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 |
|---------------------|------------|--------|--|------------------------------|
| Mica-Group Minerals | 12001-26-2 | ACGIH | TWA(respirable fraction):0.1 mg/m ³ | |
| Mica-Group Minerals | 12001-26-2 | OSHA | TWA:20 millions of particles/cu. ft. | |
| Titanium Dioxide | 13463-67-7 | ACGIH | TWA(Respirable nanoscale particles):0.2 mg/m ³ ;TWA(Respirable finescale particles):2.5 mg/m ³ | A3: Confirmed animal carcin. |
| Titanium Dioxide | 13463-67-7 | OSHA | TWA(as total dust):15 mg/m ³ | |
| Quartz Silica | 14808-60-7 | ACGIH | TWA(respirable fraction):0.025 mg/m ³ | A2: Suspected human carcin. |
| Quartz Silica | 14808-60-7 | OSHA | TWA Table Z-1(respirable):0.05 mg/m ³ ;TWA Table Z-3(respirable):0.1 mg/m ³ ;TWA concentration(respirable):0.1 mg/m ³ (2.4 millions of particles/cu. ft.) | |

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

Provide ventilated enclosure for curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. It is recommended that all dust control equipment (such as local exhaust ventilation), process equipment, and material transport systems involved in handling of this product be evaluated for the need for explosion-protection safeguards. Recognized safeguards include explosion relief vents, explosion suppression systems, and oxygen deficient process environments. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Evaluate the need for electrically classified 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:

Full Face Shield
Indirect Vented Goggles

Skin/hand protection

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

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

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

Respiratory protection

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

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Appearance | |
| Physical state | Solid |
| Color | Gray |
| Specific Physical Form: | Powder |
| Odor | Epoxy |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point | <i>No Data Available</i> |
| Boiling Point | <i>Not Applicable</i> |
| Flash Point | No flash point |
| Evaporation rate | <i>Not Applicable</i> |
| Flammability (solid, gas) | Not Classified |
| Flammable Limits(LEL) | <i>No Data Available</i> |
| Flammable Limits(UEL) | <i>No Data Available</i> |
| Vapor Pressure | <i>Not Applicable</i> |
| Vapor Density | <i>Not Applicable</i> |
| Density | 1.51 g/cm ³ [<i>Ref Std:WATER=1</i>] |
| Specific Gravity | 1.51 [<i>Ref Std:WATER=1</i>] |
| Solubility in Water | Nil |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |
| Autoignition temperature | <i>No Data Available</i> |
| Decomposition temperature | <i>No Data Available</i> |
| Viscosity | <i>Not Applicable</i> |
| Volatile Organic Compounds | 0 % |
| Percent volatile | 0 % |
| VOC Less H₂O & Exempt Solvents | 0 % |
| *Dust deflagration index (Kst) | 70 - 250 bar.m/s [<i>Details:Typical Range</i>] |
| Flash Point as text | No flash point |
| *Min. explosible conc.(MEC) | 35 - 55 g/m ³ [<i>Details:Typical Range</i>] |
| *Min. ignition energy (MIE) | 3 - 100 mJ [<i>Details:Typical Range</i>] |
| *Min. ign temp(MIT)-dust cloud | 450 - 550 °C [<i>Details:Typical Range</i>] |

* The values noted with an asterisk (*) in the above table are representative values based on testing of raw materials and selected products. Additionally, a material's characteristics may change depending upon the process and conditions of use at a facility, including further changes in particle size, or mixture with other materials. In order to obtain specific data for the material, we recommend the user conduct characterization testing based on the use factors at the specific facility.

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

Avoid shock or friction.
Sparks and/or flames

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products**Substance**

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

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

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

Inhalation:

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

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:

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

Ingestion:

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

Additional Health Effects:**Prolonged or repeated exposure may cause target organ effects:**

Prolonged or repeated exposure by inhalation may cause:

Silicosis: Signs/symptoms may include breathlessness, weakness, chest pain, persistent cough, increased amounts of sputum, and heart disease.

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| <u>Ingredient</u> | <u>CAS No.</u> | <u>Class Description</u> | <u>Regulation</u> |
|---|-----------------------|---------------------------------|---|
| Silica dust, crystalline, in the form of quartz or cristobalite | 14808-60-7 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| 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 | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Dermal | Rat | LD50 > 1,600 mg/kg |
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Ingestion | Rat | LD50 > 1,000 mg/kg |
| Mica-Group Minerals | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Mica-Group Minerals | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Quartz Silica | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Quartz Silica | Ingestion | | LD50 estimated to be > 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 |
| Feldspars | Dermal | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Feldspars | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Dicyandiamide | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Dicyandiamide | Ingestion | Rat | LD50 > 30,000 mg/kg |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Ingestion | Rat | LD50 3,200 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|------------------------|---------------------------|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Rabbit | Mild irritant |
| Quartz Silica | Professional judgement | No significant irritation |
| Titanium Dioxide | Rabbit | No significant irritation |
| Feldspars | Professional judgement | No significant irritation |
| Dicyandiamide | Human and animal | Minimal irritation |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|------------------------|---------------------------|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Rabbit | Moderate irritant |
| Titanium Dioxide | Rabbit | No significant irritation |
| Dicyandiamide | Professional judgement | Mild irritant |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Rabbit | Corrosive |

Skin Sensitization

| Name | Species | Value |
|--|------------------|----------------|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Human and animal | Sensitizing |
| Titanium Dioxide | Human | Not classified |

| | | |
|-----------------------------|-------------------------|----------------|
| | and animal | |
| Dicyandiamide | Guinea pig | Not classified |
| 4,4'-ISOPROPYLIDENEDIPHENOL | official classification | Sensitizing |

Photosensitization

| Name | Species | Value |
|-----------------------------|------------------|-------------|
| 4,4'-ISOPROPYLIDENEDIPHENOL | Human and animal | Sensitizing |

Respiratory Sensitization

| Name | Species | Value |
|--|---------|----------------|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Human | Not classified |

Germ Cell Mutagenicity

| Name | Route | Value |
|--|----------|--|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | In vivo | Not mutagenic |
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Quartz Silica | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Quartz Silica | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Titanium Dioxide | In Vitro | Not mutagenic |
| Titanium Dioxide | In vivo | Not mutagenic |
| Dicyandiamide | In Vitro | Not mutagenic |
| 4,4'-ISOPROPYLIDENEDIPHENOL | In vivo | Not mutagenic |
| 4,4'-ISOPROPYLIDENEDIPHENOL | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|--|------------|-------------------------|--|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Quartz Silica | Inhalation | Human and animal | Carcinogenic |
| Titanium Dioxide | Ingestion | Multiple animal species | Not carcinogenic |
| Titanium Dioxide | Inhalation | Rat | Carcinogenic |
| Dicyandiamide | Ingestion | Rat | Not carcinogenic |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Ingestion | Multiple animal species | 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 |
|--|-----------|--|---------|---------------------|-------------------|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Bisphenol A Diglycidyl Ether-Bisphenol A | Dermal | Not classified for development | Rabbit | NOAEL 300 | during |

| | | | | | |
|--|-----------|--|-------------------------|-----------------------|--------------------------------|
| Copolymer | | | | mg/kg/day | organogenesis |
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Dicyandiamide | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | prematuring & during gestation |
| Dicyandiamide | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 44 days |
| Dicyandiamide | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | prematuring & during gestation |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Ingestion | Not classified for female reproduction | Multiple animal species | NOAEL 50 mg/kg/day | |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Ingestion | Not classified for male reproduction | Multiple animal species | NOAEL 50 mg/kg/day | |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Ingestion | Toxic to development | Multiple animal species | NOAEL 50 mg/kg/day | |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-----------------------------|------------|------------------------|----------------------------------|-------------------------|------------------|-------------------|
| 4,4'-ISOPROPYLIDENEDIPHENOL | Inhalation | respiratory irritation | May cause respiratory irritation | Multiple animal species | LOAEL 0.152 mg/l | 15 minutes |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--|------------|--|--|---------|-----------------------|-----------------------|
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| Bisphenol A Diglycidyl Ether-Bisphenol A Copolymer | 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 |
| Mica-Group Minerals | Inhalation | pneumoconiosis | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| Quartz Silica | Inhalation | silicosis | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| 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 |
| Dicyandiamide | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 6,822 mg/kg/day | 13 weeks |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Inhalation | liver kidney and/or bladder hematopoietic system | Not classified | Rat | NOAEL 0.15 mg/l | 13 weeks |
| 4,4'-ISOPROPYLIDENEDIPHENOL | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 50 mg/kg/day | 3 generation |

| | | | | | | |
|------------------------------|-----------|---|--|-------|-----------------------|--------------|
| 4,4'-ISOPROPYLIDENEDIPH ENOL | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL 370 mg/kg/day | 13 weeks |
| 4,4'-ISOPROPYLIDENEDIPH ENOL | Ingestion | endocrine system hematopoietic system | Not classified | Rat | NOAEL 500 mg/kg/day | 3 generation |
| 4,4'-ISOPROPYLIDENEDIPH ENOL | Ingestion | nervous system | Not classified | Rat | NOAEL 185 mg/kg/day | 90 days |
| 4,4'-ISOPROPYLIDENEDIPH ENOL | Ingestion | heart bone, teeth, nails, and/or hair | Not classified | Mouse | NOAEL 2,400 mg/kg/day | 13 weeks |

Aspiration Hazard

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

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

SECTION 12: Ecological information**Ecotoxicological information**

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

Chemical fate information

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

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

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

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

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport Information

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

SECTION 15: Regulatory information**15.1. US Federal Regulations**

Contact 3M for more information.

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

Combustible Dust

Health Hazards

Carcinogenicity

Respiratory or Skin Sensitization

Serious eye damage or eye 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 material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

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

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

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.

HMIS Hazard Classification**Health:** *3 **Flammability:** 1 **Physical Hazard:** 0 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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