

Dental



Safety Data Sheet

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

1.1. Product identifier

3M™ ESPE™ Scotchbond™ Universal

Product Identification Numbers

LE-F100-1014-6, LE-F100-1014-7, LE-F100-1014-9, 70-2011-3903-0

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Adhesive

Restrictions on use

For use only by dental professionals.

1.3. Supplier's details

| | |
|---------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Oral Care Solutions Division |
| ADDRESS: | 3M Center, St. Paul, MN 55144-1000, USA |
| Telephone: | 1-888-3M HELPS (1-888-364-3577) |

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

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

2.1. Hazard classification

Flammable Liquid: Category 3.

Serious Eye Damage/Irritation: Category 1.

Skin Sensitizer: Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Corrosion | Exclamation mark |

Pictograms**Hazard Statements**

Flammable liquid and vapor.

Causes serious eye damage.

May cause an allergic skin reaction.

Precautionary Statements**Prevention:**

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

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

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

Wear protective gloves and eye/face protection.

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

Response:

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

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

Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

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

Wash contaminated clothing before reuse.

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

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

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

2.3. Hazards not otherwise classified

None.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|-------------|------------------------|
| 2-HYDROXYETHYL METHACRYLATE | 868-77-9 | 15 - 25 Trade Secret * |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | 1565-94-2 | 15 - 25 Trade Secret * |
| DECAMETHYLENE DIMETHACRYLATE | 6701-13-9 | 5 - 15 Trade Secret * |
| ETHANOL | 64-17-5 | 10 - 15 Trade Secret * |
| SILANE TREATED SILICA | 122334-95-6 | 5 - 15 Trade Secret * |

| | | |
|--|--------------|------------------------|
| WATER | 7732-18-5 | 10 - 15 Trade Secret * |
| 2-PROPENOIC ACID, 2-METHYL-, REACTION PRODUCTS WITH 1,10-DECANEDIOL AND PHOSPHOROUS OXIDE (P2O5) | 1207736-18-2 | 1 - 10 Trade Secret * |
| COPOLYMER OF ACRYLIC AND ITACONIC ACID | 25948-33-8 | 1 - 5 Trade Secret * |
| (DIMETHYLAMINO)ETHYL METHACRYLATE | 2867-47-2 | < 2 Trade Secret * |
| CAMPHORQUINONE | 10373-78-1 | < 2 Trade Secret * |
| DIMETHYLAMINO BENZOATE(-4) | 10287-53-3 | < 2 Trade Secret * |
| 2,6-DI-TERT-BUTYL-P-CRESOL | 128-37-0 | < 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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

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

Hazardous Decomposition or By-Products

| <u>Substance</u> | <u>Condition</u> |
|--------------------------|-------------------|
| Formaldehyde | During Combustion |
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Irritant Vapors or Gases | During Combustion |
| Oxides of Nitrogen | During Combustion |

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

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

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Do not get in eyes.

7.2. Conditions for safe storage including any incompatibilities

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

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

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|----------------------------|------------|--------|---|--------------------------------|
| 2,6-DI-TERT-BUTYL-P-CRESOL | 128-37-0 | ACGIH | TWA(inhalable fraction and vapor):2 mg/m3 | A4: Not class. as human carcin |
| ETHANOL | 64-17-5 | ACGIH | STEL:1000 ppm | A3: Confirmed animal carcin. |
| ETHANOL | 64-17-5 | OSHA | TWA:1900 mg/m3(1000 ppm) | |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit
 CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety Glasses with side shields

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|------------------------------------|
| General Physical Form: | Liquid |
| Specific Physical Form: | Viscous Liquid |
| Odor, Color, Grade: | Characteristic odor, yellow liquid |
| Odor threshold | No Data Available |
| pH | Not Applicable |
| Melting point | No Data Available |
| Boiling Point | >= 78 °C |
| Flash Point | 30.5 °C [Test Method: Closed Cup] |
| Evaporation rate | No Data Available |
| Flammability (solid, gas) | Not Applicable |
| Flammable Limits(LEL) | No Data Available |
| Flammable Limits(UEL) | No Data Available |
| Vapor Pressure | No Data Available |
| Vapor Density | No Data Available |
| Density | 1 - 1.2 g/cm3 |
| Specific Gravity | 1 - 1.2 [Ref Std: WATER=1] |
| Solubility in Water | Appreciable |
| 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 | Not Applicable |
| Molecular weight | No Data Available |
| Volatile Organic Compounds | No Data Available |

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
| None known. | |

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure. The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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

Skin Contact:

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

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion:

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

Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

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 |
| 2-HYDROXYETHYL METHACRYLATE | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 2-HYDROXYETHYL METHACRYLATE | Ingestion | Rat | LD50 5,564 mg/kg |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Dermal | Professional judgement | LD50 estimated to be 2,000 - 5,000 mg/kg |
| ETHANOL | Dermal | Rabbit | LD50 > 15,800 mg/kg |
| ETHANOL | Inhalation-Vapor (4 hours) | Rat | LC50 124.7 mg/l |
| ETHANOL | Ingestion | Rat | LD50 17,800 mg/kg |
| DECAMETHYLENE DIMETHACRYLATE | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| DECAMETHYLENE DIMETHACRYLATE | Dermal | Professional judgement | LD50 estimated to be 2,000 - 5,000 mg/kg |
| SILANE TREATED SILICA | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| SILANE TREATED SILICA | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| SILANE TREATED SILICA | Ingestion | Rat | LD50 > 5,110 mg/kg |
| 2-PROPENOIC ACID, 2-METHYL-, REACTION PRODUCTS WITH 1,10-DECANEDIOL AND PHOSPHOROUS OXIDE (P2O5) | Dermal | Professional judgement | LD50 estimated to be > 5,000 mg/kg |
| 2-PROPENOIC ACID, 2-METHYL-, REACTION PRODUCTS WITH 1,10-DECANEDIOL AND PHOSPHOROUS OXIDE (P2O5) | Ingestion | Rat | LD50 > 1,380 mg/kg |
| COPOLYMER OF ACRYLIC AND ITACONIC ACID | Ingestion | Rat | LD50 > 5,000 mg/kg |
| COPOLYMER OF ACRYLIC AND ITACONIC ACID | Dermal | similar health hazards | LD50 estimated to be > 5,000 mg/kg |
| CAMPHORQUINONE | Dermal | Professional judgement | LD50 estimated to be 2,000 - 5,000 mg/kg |
| CAMPHORQUINONE | Ingestion | Rat | LD50 > 2,000 mg/kg |
| DIMETHYLAMINO BENZOATE(-4) | Dermal | Rat | LD50 > 2,000 mg/kg |
| DIMETHYLAMINO BENZOATE(-4) | Ingestion | Rat | LD50 > 2,000 mg/kg |
| (DIMETHYLAMINO)ETHYL METHACRYLATE | Dermal | Rat | LD50 > 2,000 mg/kg |
| (DIMETHYLAMINO)ETHYL METHACRYLATE | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.436 mg/l |
| (DIMETHYLAMINO)ETHYL METHACRYLATE | Ingestion | Rat | LD50 > 2,000 mg/kg |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Dermal | Rat | LD50 > 2,000 mg/kg |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | Rat | LD50 > 2,930 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|------------------------|---------------------------|
| Overall product | Rabbit | No significant irritation |
| 2-HYDROXYETHYL METHACRYLATE | Rabbit | Minimal irritation |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Not available | Minimal irritation |
| ETHANOL | Rabbit | No significant irritation |
| DECAMETHYLENE DIMETHACRYLATE | Professional judgement | Irritant |
| SILANE TREATED SILICA | Rabbit | No significant irritation |
| DIMETHYLAMINO BENZOATE(-4) | Rabbit | No significant irritation |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Human and animal | Minimal irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|------------------------|---------------------------|
| Overall product | In vitro data | Corrosive |
| 2-HYDROXYETHYL METHACRYLATE | Rabbit | Moderate irritant |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Not available | Moderate irritant |
| ETHANOL | Rabbit | Moderate irritant |
| DECAMETHYLENE DIMETHACRYLATE | Professional judgement | Severe irritant |
| SILANE TREATED SILICA | Rabbit | No significant irritation |
| DIMETHYLAMINO BENZOATE(-4) | Rabbit | Mild irritant |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Rabbit | Mild irritant |

Skin Sensitization

| Name | Species | Value |
|--|------------------|--|
| 2-HYDROXYETHYL METHACRYLATE | Human and animal | Sensitizing |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Guinea pig | Sensitizing |
| ETHANOL | Human | Some positive data exist, but the data are not sufficient for classification |
| DECAMETHYLENE DIMETHACRYLATE | | Sensitizing |
| SILANE TREATED SILICA | Human and animal | Not sensitizing |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Human | Some positive data exist, but the data are not sufficient for classification |

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 |
|--|----------|--|
| 2-HYDROXYETHYL METHACRYLATE | In vivo | Not mutagenic |
| 2-HYDROXYETHYL METHACRYLATE | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | In Vitro | Some positive data exist, but the data are not |

| | | |
|----------------------------|----------|---|
| ETHANOL | In Vitro | sufficient for classification Some positive data exist, but the data are not sufficient for classification |
| ETHANOL | In vivo | Some positive data exist, but the data are not sufficient for classification |
| SILANE TREATED SILICA | In Vitro | Not mutagenic |
| 2,6-DI-TERT-BUTYL-P-CRESOL | In Vitro | Not mutagenic |
| 2,6-DI-TERT-BUTYL-P-CRESOL | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|----------------------------|---------------|-------------------------|--|
| ETHANOL | Ingestion | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| SILANE TREATED SILICA | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| 2,6-DI-TERT-BUTYL-P-CRESOL | 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 |
|--|------------|--|---------|-----------------------|------------------------------|
| 2-HYDROXYETHYL METHACRYLATE | Ingestion | Not toxic to female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| 2-HYDROXYETHYL METHACRYLATE | Ingestion | Not toxic to male reproduction | Rat | NOAEL 1,000 mg/kg/day | 49 days |
| 2-HYDROXYETHYL METHACRYLATE | Ingestion | Not toxic to development | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Ingestion | Not toxic to female reproduction | Mouse | NOAEL 0.8 mg/kg/day | premating & during gestation |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Ingestion | Not toxic to male reproduction | Mouse | NOAEL 0.8 mg/kg/day | premating & during gestation |
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Ingestion | Not toxic to development | Mouse | NOAEL 0.8 mg/kg/day | premating & during gestation |
| ETHANOL | Inhalation | Not toxic to development | Rat | NOAEL 38 mg/l | during gestation |
| ETHANOL | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 5,200 mg/kg/day | premating & during gestation |
| SILANE TREATED SILICA | Ingestion | Not toxic to female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| SILANE TREATED SILICA | Ingestion | Not toxic to male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| SILANE TREATED SILICA | Ingestion | Not toxic to development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | Not toxic to female reproduction | Rat | NOAEL 500 mg/kg/day | 2 generation |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | Not toxic to male reproduction | Rat | NOAEL 500 mg/kg/day | 2 generation |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 100 mg/kg/day | 2 generation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--|------------|-----------------------------------|--|-------------------------|---------------------|-------------------|
| ETHANOL | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | LOAEL 2.6 mg/l | 30 minutes |
| ETHANOL | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | LOAEL 9.4 mg/l | not available |
| ETHANOL | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Multiple animal species | NOAEL not available | |
| ETHANOL | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Dog | NOAEL 3,000 mg/kg | |
| DECAMETHYLENE DIMETHACRYLATE | Inhalation | respiratory irritation | May cause respiratory irritation | | NOAEL Not available | |
| COPOLYMER OF ACRYLIC AND ITACONIC ACID | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 5,000 mg/kg | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--|------------|--|--|---------|-----------------------|--------------------------------|
| BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA) | Ingestion | endocrine system liver nervous system kidney and/or bladder | All data are negative | Mouse | NOAEL 0.8 mg/kg/day | prematuring & during gestation |
| ETHANOL | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Rabbit | LOAEL 124 mg/l | 365 days |
| ETHANOL | Inhalation | hematopoietic system immune system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 25 mg/l | 14 days |
| ETHANOL | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 8,000 mg/kg/day | 4 months |
| ETHANOL | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Dog | NOAEL 3,000 mg/kg/day | 7 days |
| SILANE TREATED SILICA | Inhalation | respiratory system silicosis | All data are negative | Human | NOAEL Not available | occupational exposure |
| COPOLYMER OF ACRYLIC AND ITACONIC ACID | Ingestion | endocrine system hematopoietic system liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 200 mg/kg/day | 28 days |
| COPOLYMER OF ACRYLIC AND ITACONIC ACID | Ingestion | heart bone, teeth, nails, and/or hair immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system | All data are negative | Rat | NOAEL 2,000 mg/kg/day | 28 days |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 250 mg/kg/day | 28 days |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 500 mg/kg/day | 2 generation |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | blood | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 420 mg/kg/day | 40 days |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | endocrine system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 25 mg/kg/day | 2 generation |
| 2,6-DI-TERT-BUTYL-P-CRESOL | Ingestion | heart | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL 3,480 mg/kg/day | 10 weeks |

Aspiration Hazard

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

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D035 (Methyl ethyl ketone)

SECTION 14: Transport Information

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

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

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

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

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

SECTION 16: Other information

NFPA Hazard Classification

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

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

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