



Safety Data Sheet

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|------------------------|-----------|-------------------------|----------|
| Document Group: | 24-9272-6 | Version Number: | 3.01 |
| Issue Date: | 07/09/21 | Supersedes Date: | 04/23/15 |

Product identifier

DYNATRON® DYNA-GLAZE, 591

| ID Number | UPC | ID Number | UPC |
|----------------|-----|-----------|-----|
| 70-0080-0353-8 | | | |

Recommended use

Automotive

Supplier's details

MANUFACTURER: 3M
DIVISION: Automotive Aftermarket

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

Emergency telephone number

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

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

24-8895-5, 26-9510-4

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| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 26-9510-4 | Version Number: | 11.00 |
| Issue Date: | 02/25/22 | Supersedes Date: | 12/07/21 |

SECTION 1: Identification

1.1. Product identifier

3M™ Blue Cream Hardener

Product Identification Numbers

| ID Number | UPC | ID Number | UPC |
|----------------|-----|----------------|-----|
| LB-K100-0788-3 | | LB-K100-0801-2 | |
| 41-0003-6567-0 | | 41-0003-6575-3 | |
| 41-0003-6576-1 | | 41-0003-6577-9 | |
| 41-0003-6578-7 | | 41-0003-6610-8 | |
| 41-0003-6613-2 | | 41-0003-6614-0 | |
| 60-4550-4563-7 | | 60-4550-4689-0 | |

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Hardener for Body Fillers

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Automotive Aftermarket |
| 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

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Organic Peroxide: Type E.
Serious Eye Damage/Irritation: Category 2A.
Skin Sensitizer: Category 1B.
Specific Target Organ Toxicity (single exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard |

Pictograms**Hazard Statements**

Heating may cause a fire.

Causes serious eye irritation.

May cause an allergic skin reaction.

Causes damage to organs:

cardiovascular system |

nervous system |

kidney/urinary tract |

respiratory system |

Precautionary Statements**General:**

Keep out of reach of children.

Prevention:

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

Keep away from clothing and other combustible materials.

Keep only in original container.

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

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

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

Response:

IF 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: Call a POISON CENTER or doctor/physician.

Specific treatment (see Notes to Physician on this label).

Storage:

Protect from sunlight.

Store at temperatures not exceeding 32C/90F. Keep cool.

Store locked up.

Store away from other materials.

Disposal:

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

Notes to Physician:

This product contains ethylene glycol. If there is reasonable suspicion of ethylene glycol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

12% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--|-------------|------------------------|
| Benzoyl Peroxide | 94-36-0 | 30 - 60 Trade Secret * |
| Benzoic Acid, C9-11-Branched Alkyl Esters | 131298-44-7 | 10 - 30 Trade Secret * |
| Water | 7732-18-5 | 10 - 30 Trade Secret * |
| Calcium Sulfate | 7778-18-9 | 1 - 10 Trade Secret * |
| Zinc Stearate | 557-05-1 | 1 - 10 Trade Secret * |
| Ethylene Glycol | 107-21-1 | <= 7.5 Trade Secret * |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | 9038-95-3 | <= 5 Trade Secret * |
| Ferric Ammonium Ferrocyanide | 25869-00-5 | <= 1 Trade Secret * |
| Ferric Ferrocyanide | 14038-43-8 | <= 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:

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). Target organ effects. See Section 11 for additional details.

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

This product contains ethylene glycol. If there is reasonable suspicion of ethylene glycol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

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

Closed containers exposed to heat from fire may build pressure and explode. Part of the oxygen for combustion is supplied by the peroxide itself.

Hazardous Decomposition or By-Products

| <u>Substance</u> | <u>Condition</u> |
|-------------------------------|-------------------|
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Toxic Vapor, Gas, Particulate | During Combustion |

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. 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. 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

Collect as much of the spilled material as possible using non-sparking tools. 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

Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store at temperatures not exceeding 32C/90F. Keep cool. Keep only in original container. Store away from other materials. Keep/store away from clothing and other combustible materials.

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 |
|-------------------|-------------------|---------------|--|--------------------------------|
| Ethylene Glycol | 107-21-1 | ACGIH | TWA(Vapor fraction):25 ppm;STEL(Vapor fraction):50 | A4: Not class. as human carcin |

| | | | | |
|------------------|-----------|-------|--|--------------------------------|
| | | | ppm;STEL(Inhalable aerosol):10 mg/m3 | |
| Zinc Stearate | 557-05-1 | OSHA | TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3 | |
| Calcium Sulfate | 7778-18-9 | ACGIH | TWA(inhalable fraction):10 mg/m3 | |
| Calcium Sulfate | 7778-18-9 | OSHA | TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3 | |
| Benzoyl Peroxide | 94-36-0 | ACGIH | TWA:5 mg/m3 | A4: Not class. as human carcin |
| Benzoyl Peroxide | 94-36-0 | OSHA | TWA:5 mg/m3 | |

ACGIH : American Conference of Governmental Industrial Hygienists
 AIHA : American Industrial Hygiene Association
 CMRG : Chemical Manufacturer's Recommended Guidelines
 OSHA : United States Department of Labor - Occupational Safety and Health Administration
 TWA: Time-Weighted-Average
 STEL: Short Term Exposure Limit
 CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Indirect Vented Goggles

Skin/hand protection

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

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

Solid

Color

Blue

Specific Physical Form:

Paste

Odor

Slight Ester

Odor threshold

No Data Available

pH

No Data Available

Melting point

No Data Available

Boiling Point

Not Applicable

Flash Point

111 °C [*Test Method:Estimated*]

Evaporation rate

No Data Available

Flammability (solid, gas)

Organic Peroxide: Type E.

Flammable Limits(LEL)

Not Applicable

Flammable Limits(UEL)

Not Applicable

Vapor Pressure

No Data Available

Vapor Density

No Data Available

Density

1.2 g/ml

Specific Gravity

1.2 [*Ref Std:WATER=1*] [*Details:@ 25 C*]

Solubility in Water

Negligible

Solubility- non-water

No Data Available

Partition coefficient: n-octanol/ water

No Data Available

Autoignition temperature

410 °C [*Test Method:Estimated*]

Decomposition temperature

No Data Available

Viscosity

70,000 centipoise - 150,000 centipoise

Hazardous Air Pollutants

0 - 0.1209 lb HAPS/lb solids [*Test Method:Calculated*]

Molecular weight

No Data Available

Volatile Organic Compounds

0 % weight [*Test Method:calculated per CARB title 2*]

Volatile Organic Compounds

0 - 90 g/l [*Test Method:calculated SCAQMD rule 443.1*]

Percent volatile

21 - 28.5 % weight

VOC Less H2O & Exempt Solvents

0 - 121 g/l [*Test Method:calculated SCAQMD rule 443.1*]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Accelerators

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.

Skin Contact:

May be harmful in contact with skin.

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

Eye Contact:

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

Ingestion:

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

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

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 >2,000 - ≤5,000 mg/kg |
| Overall product | Inhalation-Dust/Mist(4 hr) | | No data available; calculated ATE >12.5 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Benzoyl Peroxide | Dermal | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Benzoyl Peroxide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 24.3 mg/l |
| Benzoyl Peroxide | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Benzoic Acid, C9-11-Branched Alkyl Esters | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Benzoic Acid, C9-11-Branched Alkyl Esters | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5 mg/l |
| Benzoic Acid, C9-11-Branched Alkyl Esters | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Calcium Sulfate | Dermal | Professional judgement | LD50 estimated to be > 5,000 mg/kg |
| Calcium Sulfate | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Ethylene Glycol | Ingestion | Human | LD50 1,600 mg/kg |
| Ethylene Glycol | Inhalation-Dust/Mist (4 hours) | Other | LC50 estimated to be 5 - 12.5 mg/l |
| Ethylene Glycol | Dermal | Rabbit | 9,530 mg/kg |
| Zinc Stearate | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Zinc Stearate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 50 mg/l |
| Zinc Stearate | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Dermal | Rabbit | LD50 > 16,960 mg/kg |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5 mg/l |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Ingestion | Rat | LD50 4,240 mg/kg |
| Ferric Ammonium Ferrocyanide | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Ferric Ferrocyanide | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Ferric Ammonium Ferrocyanide | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Ferric Ferrocyanide | Ingestion | Rat | LD50 > 8,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|---------|---------------------------|
| Benzoyl Peroxide | Rabbit | Minimal irritation |
| Ethylene Glycol | Rabbit | Minimal irritation |
| Zinc Stearate | Rabbit | No significant irritation |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Rabbit | Minimal irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|---------|---------------------------|
| Benzoyl Peroxide | Rabbit | Severe irritant |
| Ethylene Glycol | Rabbit | Mild irritant |
| Zinc Stearate | Rabbit | No significant irritation |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|------------------|------------|-------------|
| Benzoyl Peroxide | Guinea pig | Sensitizing |

| | | |
|-----------------|-------|----------------|
| Ethylene Glycol | Human | 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 |
|------------------|----------|---------------|
| Benzoyl Peroxide | In Vitro | Not mutagenic |
| Benzoyl Peroxide | In vivo | Not mutagenic |
| Ethylene Glycol | In Vitro | Not mutagenic |
| Ethylene Glycol | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|--|-----------|-------------------------|--|
| Benzoyl Peroxide | Ingestion | Multiple animal species | Not carcinogenic |
| Benzoyl Peroxide | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Ethylene Glycol | Ingestion | Multiple animal species | Not carcinogenic |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Ingestion | Rat | Not carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|--|------------|--|---------|-----------------------|-------------------------------|
| Benzoyl Peroxide | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | pre mating & during gestation |
| Benzoyl Peroxide | Ingestion | Not classified for male reproduction | Rat | NOAEL 500 mg/kg/day | pre mating & during gestation |
| Benzoyl Peroxide | Ingestion | Not classified for development | Rat | NOAEL 500 mg/kg/day | pre mating & during gestation |
| Ethylene Glycol | Dermal | Not classified for development | Mouse | NOAEL 3,549 mg/kg/day | during organogenesis |
| Ethylene Glycol | Ingestion | Not classified for development | Mouse | LOAEL 750 mg/kg/day | during organogenesis |
| Ethylene Glycol | Inhalation | Not classified for development | Mouse | NOAEL 1,000 mg/kg/day | during organogenesis |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Inhalation | Not classified for male reproduction | Rat | NOAEL 1 mg/l | 2 weeks |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-----------------|-----------|---|-----------------------------------|---------|---------------------|------------------------|
| Ethylene Glycol | Ingestion | heart nervous system kidney and/or bladder respiratory system | Causes damage to organs | Human | NOAEL Not available | poisoning and/or abuse |
| Ethylene Glycol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| Ethylene Glycol | Ingestion | liver | Not classified | Human | NOAEL Not available | poisoning |

| | | | | | | |
|--|-----------|----------------|----------------|-----|---------------------|--------------|
| | | | | | available | and/or abuse |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Ingestion | nervous system | Not classified | Rat | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--|------------|---|--|-------------------------|------------------------|-------------------|
| Ethylene Glycol | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 200 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | vascular system | Not classified | Rat | NOAEL 200 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | heart hematopoietic system liver immune system muscles | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | respiratory system | Not classified | Mouse | NOAEL 12,000 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | skin endocrine system bone, teeth, nails, and/or hair nervous system eyes | Not classified | Multiple animal species | NOAEL 1,000 mg/kg/day | 2 years |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Inhalation | endocrine system hematopoietic system liver nervous system | Not classified | Rat | NOAEL 1 mg/l | 2 weeks |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Inhalation | kidney and/or bladder | Not classified | Rat | NOAEL 0.005 mg/l | 2 weeks |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Inhalation | respiratory system | Not classified | Rat | LOAEL 0.001 mg/l | 2 weeks |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Inhalation | heart | Not classified | Rat | NOAEL 0.5 mg/l | 2 weeks |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Ingestion | liver kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 145 mg/kg/day | 90 days |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Ingestion | hematopoietic system | Not classified | Rat | NOAEL 500 mg/kg/day | 2 years |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Ingestion | heart endocrine system respiratory system | Not classified | Rat | NOAEL 3,770 mg/kg/day | 90 days |

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 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.

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

Organic peroxide

Health Hazards

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

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

| <u>Ingredient</u> | <u>C.A.S. No</u> | <u>% by Wt</u> |
|--------------------------------|------------------|----------------------|
| Ethylene Glycol | 107-21-1 | Trade Secret <= 7.5 |
| Zinc Stearate (ZINC COMPOUNDS) | 557-05-1 | Trade Secret 1 - 10 |
| Benzoyl Peroxide | 94-36-0 | Trade Secret 30 - 60 |
| Ferric Ferrocyanide (CYANIDES) | 14038-43-8 | Trade Secret <= 1 |

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:** Oxidizer

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: | 26-9510-4 | Version Number: | 11.00 |
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Safety Data Sheet

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|------------------------|-----------|-------------------------|----------|
| Document Group: | 24-8895-5 | Version Number: | 5.01 |
| Issue Date: | 06/28/21 | Supersedes Date: | 04/20/18 |

SECTION 1: Identification

1.1. Product identifier

3M™ DYNATRON® DYNA-GLAZE, 591

Product Identification Numbers

LB-K100-0549-7

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Auto Refinishing filler - Putty

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Automotive Aftermarket |
| 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

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Liquid: Category 3.

Serious Eye Damage/Irritation: Category 2B.

Reproductive Toxicity: Category 1B.

Carcinogenicity: Category 2.

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

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

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

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard |

Pictograms**Hazard Statements**

Flammable liquid and vapor.

Causes eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.
Suspected of causing cancer.

Causes damage to organs:

liver |
sensory organs |

Causes damage to organs through prolonged or repeated exposure:

respiratory system |
sensory organs |

May cause damage to organs through prolonged or repeated exposure:

liver |

Precautionary Statements**General:**

Keep out of reach of children.

Prevention:

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
If eye irritation persists: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

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 container tightly closed.

Keep cool.

Store locked up.

Disposal:

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

26% of the mixture consists of ingredients of unknown acute oral toxicity.

26% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---------------------------------------|---------------|------------------------|
| Styrene Monomer | 100-42-5 | 15 - 40 Trade Secret * |
| Talc | 14807-96-6 | 10 - 30 Trade Secret * |
| Polyester Resin | Trade Secret* | 10 - 30 |
| Limestone | 1317-65-3 | 7 - 13 Trade Secret * |
| Oxide Glass Chemicals | 65997-17-3 | 5 - 10 Trade Secret * |
| Titanium Dioxide | 13463-67-7 | 5 - 10 Trade Secret * |
| Synthetic Crystalline-Free Silica Gel | 112926-00-8 | 1 - 5 Trade Secret * |
| Toluene | 108-88-3 | < 0.15 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. If you feel unwell, get medical attention.

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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details. 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 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.

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. 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. 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. 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. Cover spill area with a fire-extinguishing foam. 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 using non-sparking tools. Place in a metal 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**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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 |
|--|-------------|-------------------------|---|---|
| Styrene Monomer | 100-42-5 | ACGIH | TWA:10 ppm;STEL:20 ppm | A3: Confirmed animal carcin., Ototoxicant |
| Styrene Monomer | 100-42-5 | OSHA | TWA:100 ppm;CEIL:200 ppm | |
| Toluene | 108-88-3 | ACGIH | TWA:20 ppm | A4: Not class. as human carcin, Ototoxicant |
| Toluene | 108-88-3 | OSHA | TWA:200 ppm;CEIL:300 ppm | |
| SILICA, AMORPHOUS | 112926-00-8 | OSHA | TWA:20 millions of particles/cu. ft.;TWA concentration:0.8 mg/m3 | |
| Limestone | 1317-65-3 | OSHA | TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3 | |
| Titanium Dioxide | 13463-67-7 | ACGIH | TWA:10 mg/m3 | A4: Not class. as human carcin |
| Titanium Dioxide | 13463-67-7 | OSHA | TWA(as total dust):15 mg/m3 | |
| Talc | 14807-96-6 | ACGIH | TWA(respirable fraction):2 mg/m3 | A4: Not class. as human carcin |
| TALC | 14807-96-6 | OSHA | TWA - Use asbestos limits: | |
| Talc | 14807-96-6 | OSHA | TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft. | |
| CONTINUOUS FILAMENT GLASS FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):1 fiber/cc | A4: Not class. as human carcin |
| CONTINUOUS FILAMENT GLASS FIBERS, INHALABLE FRACTION | 65997-17-3 | ACGIH | TWA(inhalable fraction):5 mg/m3 | A4: Not class. as human carcin |
| Oxide Glass Chemicals | 65997-17-3 | Manufacturer determined | TWA(as non-fibrous, respirable)(8 hours):3 mg/m3;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m3 | |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure

Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Indirect Vented Goggles

Skin/hand protection

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

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

Polyvinyl Alcohol (PVA)

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

Yellow

Odor

Strong Solvent

Odor threshold

No Data Available

pH

No Data Available

Melting point

No Data Available

Boiling Point

293 °F

Flash Point

88 °F [*Test Method: Closed Cup*]

Evaporation rate

0.1 - 0.5 [*Ref Std: BUOAC=1*]

Flammability (solid, gas)

Not Applicable

Flammable Limits(LEL)

No Data Available

Flammable Limits(UEL)

No Data Available

Vapor Pressure

4.5 mmHg

Vapor Density

3.6000 [*Ref Std: AIR=1*]

Density

1.02 g/ml

Specific Gravity

1.02 [*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 | 70,000 - 85,000 centipoise |
| Hazardous Air Pollutants | 0.58 lb HAPS/lb solids [<i>Test Method</i> :Calculated] |
| Volatile Organic Compounds | 277 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1] |
| Volatile Organic Compounds | 27.1 % weight [<i>Test Method</i> :calculated per CARB title 2] |
| Percent volatile | 27.3 % weight |
| VOC Less H2O & Exempt Solvents | 277 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1] |

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

Sparks and/or flames

10.5. Incompatible materials

Strong acids

Strong oxidizing agents

Alkali and alkaline earth metals

10.6. Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
| Hydrocarbons | Not Specified |
| Carbon monoxide | Not Specified |
| Carbon dioxide | Not Specified |

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:

May be harmful if inhaled.

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.

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.

May cause additional health effects (see below).

Additional Health Effects:**Single exposure may cause target organ effects:**

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

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

Prolonged or repeated exposure may cause target organ effects:

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

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Reproductive/Developmental Toxicity:

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

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| Ingredient | CAS No. | Class Description | Regulation |
|--------------------------|------------|--------------------------------|---|
| Generic: GLASS FILAMENTS | 65997-17-3 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| Generic: TALC | 14807-96-6 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| Styrene Monomer | 100-42-5 | Grp. 2A: Probable human carc. | International Agency for Research on Cancer |
| Styrene Monomer | 100-42-5 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| 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 | Inhalation-Vapor(4 hr) | | No data available; calculated ATE20 - 50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Styrene Monomer | Dermal | Rat | LD50 > 2,000 mg/kg |
| Styrene Monomer | Inhalation- | Rat | LC50 11.8 mg/l |

| | | | |
|---------------------------------------|--------------------------------|--------|--|
| | Vapor (4 hours) | | |
| Styrene Monomer | Ingestion | Rat | LD50 5,000 mg/kg |
| Talc | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Talc | Ingestion | | LD50 estimated to be > 5,000 mg/kg |
| Limestone | Dermal | Rat | LD50 > 2,000 mg/kg |
| Limestone | Inhalation-Dust/Mist (4 hours) | Rat | LC50 3 mg/l |
| Limestone | Ingestion | Rat | LD50 6,450 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 |
| Oxide Glass Chemicals | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Oxide Glass Chemicals | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Synthetic Crystalline-Free Silica Gel | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Synthetic Crystalline-Free Silica Gel | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Synthetic Crystalline-Free Silica Gel | Ingestion | Rat | LD50 > 5,110 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 |
|---------------------------------------|------------------------|---------------------------|
| Styrene Monomer | Professional judgement | Mild irritant |
| Talc | Rabbit | No significant irritation |
| Limestone | Rabbit | No significant irritation |
| Titanium Dioxide | Rabbit | No significant irritation |
| Oxide Glass Chemicals | Professional judgement | No significant irritation |
| Synthetic Crystalline-Free Silica Gel | Rabbit | No significant irritation |
| Toluene | Rabbit | Irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---------------------------------------|------------------------|---------------------------|
| Styrene Monomer | Professional judgement | Moderate irritant |
| Talc | Rabbit | No significant irritation |
| Limestone | Rabbit | No significant irritation |
| Titanium Dioxide | Rabbit | No significant irritation |
| Oxide Glass Chemicals | Professional judgement | No significant irritation |
| Synthetic Crystalline-Free Silica Gel | Rabbit | No significant irritation |
| Toluene | Rabbit | Moderate irritant |

Skin Sensitization

| Name | Species | Value |
|---------------------------------------|------------------|----------------|
| Styrene Monomer | Guinea pig | Not classified |
| Titanium Dioxide | Human and animal | Not classified |
| Synthetic Crystalline-Free Silica Gel | Human and animal | Not classified |
| Toluene | Guinea pig | Not classified |

Respiratory Sensitization

| Name | Species | Value |
|------|---------|----------------|
| Talc | Human | Not classified |

Germ Cell Mutagenicity

| Name | Route | Value |
|---------------------------------------|----------|--|
| Styrene Monomer | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Styrene Monomer | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Talc | In Vitro | Not mutagenic |
| Talc | In vivo | Not mutagenic |
| Titanium Dioxide | In Vitro | Not mutagenic |
| Titanium Dioxide | In vivo | Not mutagenic |
| Oxide Glass Chemicals | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Synthetic Crystalline-Free Silica Gel | In Vitro | Not mutagenic |
| Toluene | In Vitro | Not mutagenic |
| Toluene | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|---------------------------------------|---------------|-------------------------|--|
| Styrene Monomer | Ingestion | Mouse | Carcinogenic |
| Styrene Monomer | Inhalation | Human and animal | Carcinogenic |
| Talc | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| Titanium Dioxide | Ingestion | Multiple animal species | Not carcinogenic |
| Titanium Dioxide | Inhalation | Rat | Carcinogenic |
| Oxide Glass Chemicals | Inhalation | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| Synthetic Crystalline-Free Silica Gel | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| 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 |
|---------------------------------------|------------|--|-------------------------|-----------------------|--------------------------------|
| Styrene Monomer | Ingestion | Not classified for female reproduction | Rat | NOAEL 21 mg/kg/day | 3 generation |
| Styrene Monomer | Inhalation | Not classified for female reproduction | Rat | NOAEL 2.1 mg/l | 2 generation |
| Styrene Monomer | Inhalation | Not classified for male reproduction | Rat | NOAEL 2.1 mg/l | 2 generation |
| Styrene Monomer | Ingestion | Not classified for male reproduction | Rat | NOAEL 400 mg/kg/day | 60 days |
| Styrene Monomer | Ingestion | Not classified for development | Rat | NOAEL 400 mg/kg/day | during gestation |
| Styrene Monomer | Inhalation | Not classified for development | Multiple animal species | NOAEL 2.1 mg/l | during gestation |
| Talc | Ingestion | Not classified for development | Rat | NOAEL 1,600 mg/kg | during organogenesis |
| Limestone | Ingestion | Not classified for development | Rat | NOAEL 625 mg/kg/day | prematuring & during gestation |
| Synthetic Crystalline-Free Silica Gel | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Synthetic Crystalline-Free Silica Gel | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Synthetic Crystalline-Free Silica Gel | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| Toluene | Inhalation | Not classified for female reproduction | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | Not classified for male reproduction | Rat | NOAEL 2.3 mg/l | 1 generation |
| Toluene | Ingestion | Toxic to development | Rat | LOAEL 520 mg/kg/day | during gestation |
| Toluene | Inhalation | Toxic to development | Human | NOAEL Not available | poisoning and/or abuse |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-----------------|--------------|-----------------------------------|--|-------------------------|---------------------|--------------------------|
| Styrene Monomer | Inhalation | auditory system | Causes damage to organs | Multiple animal species | LOAEL 4.3 mg/l | not available |
| Styrene Monomer | Inhalation | liver | Causes damage to organs | Mouse | LOAEL 2.1 mg/l | not available |
| Styrene Monomer | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | occupational exposure |
| Styrene Monomer | Inhalation | respiratory irritation | May cause respiratory irritation | Human and animal | NOAEL Not available | |
| Styrene Monomer | Inhalation | endocrine system | Not classified | Rat | NOAEL Not available | not available |
| Styrene Monomer | Inhalation | kidney and/or bladder | Not classified | Multiple animal species | NOAEL 2.1 mg/l | not available |
| Limestone | Inhalation | respiratory system | Not classified | Rat | NOAEL 0.812 mg/l | 90 minutes |
| 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 |
|---------------------------------------|------------|--|--|-------------------------|----------------------------|------------------------|
| Styrene Monomer | Inhalation | auditory system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL not available | occupational exposure |
| Styrene Monomer | Inhalation | eyes | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| Styrene Monomer | Inhalation | liver | May cause damage to organs though prolonged or repeated exposure | Mouse | LOAEL 0.85 mg/l | 13 weeks |
| Styrene Monomer | Inhalation | nervous system | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | LOAEL 1.1 mg/l | not available |
| Styrene Monomer | Inhalation | hematopoietic system | Not classified | Rat | NOAEL 0.85 mg/l | 7 days |
| Styrene Monomer | Inhalation | endocrine system | Not classified | Rat | NOAEL 0.6 mg/l | 10 days |
| Styrene Monomer | Inhalation | respiratory system | Not classified | Multiple animal species | LOAEL 0.09 mg/l | not available |
| Styrene Monomer | Inhalation | heart gastrointestinal tract bone, teeth, nails, and/or hair muscles kidney and/or bladder | Not classified | Multiple animal species | NOAEL 4.3 mg/l | 2 years |
| Styrene Monomer | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 500 mg/kg/day | 8 weeks |
| Styrene Monomer | Ingestion | immune system | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | NOAEL Not available | not available |
| Styrene Monomer | Ingestion | liver kidney and/or bladder | Not classified | Rat | NOAEL 677 mg/kg/day | 6 months |
| Styrene Monomer | Ingestion | hematopoietic system | Not classified | Dog | NOAEL 600 mg/kg/day | 470 days |
| Styrene Monomer | Ingestion | heart respiratory system | Not classified | Rat | NOAEL 35 mg/kg/day | 105 weeks |
| Talc | Inhalation | pneumoconiosis | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| Talc | Inhalation | pulmonary fibrosis respiratory system | Not classified | Rat | NOAEL 18 mg/m ³ | 113 weeks |
| Limestone | Inhalation | respiratory system | Not classified | 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 |
| Oxide Glass Chemicals | Inhalation | respiratory system | Not classified | Human | NOAEL not available | occupational exposure |
| Synthetic Crystalline-Free Silica Gel | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | auditory system eyes olfactory system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | nervous system | May cause damage to organs 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 | 4 weeks |

| | | | | | mg/l | |
|---------|------------|--|--|-------------------------|-----------------------|-----------------------|
| Toluene | Inhalation | immune system | Not classified | Mouse | NOAEL Not available | 20 days |
| Toluene | Inhalation | bone, teeth, nails, and/or hair | Not classified | Mouse | NOAEL 1.1 mg/l | 8 weeks |
| Toluene | Inhalation | hematopoietic system vascular system | Not classified | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | gastrointestinal tract | Not classified | Multiple animal species | NOAEL 11.3 mg/l | 15 weeks |
| Toluene | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 625 mg/kg/day | 13 weeks |
| Toluene | Ingestion | heart | Not classified | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | liver kidney and/or bladder | Not classified | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | hematopoietic system | Not classified | Mouse | NOAEL 600 mg/kg/day | 14 days |
| Toluene | Ingestion | endocrine system | Not classified | Mouse | NOAEL 105 mg/kg/day | 28 days |
| Toluene | Ingestion | immune system | Not classified | Mouse | NOAEL 105 mg/kg/day | 4 weeks |

Aspiration Hazard

| Name | Value |
|-----------------|-------------------|
| Styrene Monomer | Aspiration hazard |
| 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.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

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

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

Health Hazards

Carcinogenicity

Reproductive toxicity

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

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

| <u>Ingredient</u> | <u>C.A.S. No</u> | <u>% by Wt</u> |
|-------------------|------------------|----------------------|
| Styrene Monomer | 100-42-5 | Trade Secret 15 - 40 |

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

| <u>Ingredient</u> | <u>C.A.S. No.</u> | <u>Listing</u> |
|------------------------------------|-------------------|----------------|
| Talc containing asbestiform fibers | None | Carcinogen |

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:** 3 **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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