

Safety Data Sheet

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| Document Group: | 24-8073-9 | Version Number: | 3.01 |
|-----------------|-----------|------------------|----------|
| Issue Date: | 10/12/17 | Supercedes Date: | 05/04/15 |

Product identifier

3M[™] Dynatron[®] Dyna-Hair[®] Long Strand, P.N. 472, 474

ID Number(s):

70-0080-0334-8, 70-0080-0335-5

Recommended use

Automotive

Supplier's details

| MANUFACTURER: | 3M |
|------------------------|---|
| DIVISION: | Automotive Aftermarket |
| ADDRESS: Telephone: | 3M Center, St. Paul, MN 55144-1000, USA 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:

24-6791-8, 29-5993-0

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| Document Group: | 24-6791-8 | Version Number: | 9.00 |
|-----------------|-----------|------------------|----------|
| Issue Date: | 10/12/17 | Supercedes Date: | 11/02/15 |

SECTION 1: Identification

1.1. Product identifier

3M[™] Dynatron[®] Dyna-Hair[®] Long Strand, P.N. 472, 474

Product Identification Numbers

LB-K100-0507-2, LB-K100-0507-3

1.2. Recommended use and restrictions on use

Recommended use Automotive, Body filler

| 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. Carcinogenicity: Category 2. Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements Signal word Danger Symbols Flame | Health Hazard |

Pictograms



Hazard Statements Flammable liquid and vapor.

Causes eye irritation. 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. Wear protective gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

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.

If eye irritation persists: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

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. Keep container tightly closed. Store locked up.

Disposal:

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

5% of the mixture consists of ingredients of unknown acute oral toxicity.5% of the mixture consists of ingredients of unknown acute dermal toxicity.48% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|-----------------------|---------------|------------------------|
| Polyester Polymer | Trade Secret* | 30 - 60 Trade Secret * |
| Magnesium Carbonate | 546-93-0 | 10 - 30 Trade Secret * |
| Styrene Monomer | 100-42-5 | 10 - 30 Trade Secret * |
| Talc | 14807-96-6 | 10 - 30 Trade Secret * |
| Oxide Glass Chemicals | 65997-17-3 | 1 - 5 Trade Secret * |
| Fiber | Trade Secret* | 1 - 5 Trade Secret * |
| Chlorite (mineral) | 1318-59-8 | < 2 Trade Secret * |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

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

Eye Contact:

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

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> |
|-------------------------------|-------------------|
| Aldehydes | During Combustion |
| Hydrocarbons | During Combustion |
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Toxic Vapor, Gas, Particulate | 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. 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

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/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

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Store in a well-ventilated place. Keep cool. Keep container tightly closed to prevent loss of stabilizing materials. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Store away from acids. Store away from strong bases. 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:20 ppm;STEL:40 ppm | A4: Not class. as human |
| | | | | carcin |
| Styrene Monomer | 100-42-5 | OSHA | TWA:100 ppm;CEIL:200 ppm | |
| Talc | 14807-96-6 | ACGIH | TWA(respirable fraction):2 | A4: Not class. as human |
| | | | mg/m3 | carcin |
| Talc | 14807-96-6 | OSHA | TWA:2 mg/m3 | |
| Magnesium Carbonate | 546-93-0 | OSHA | TWA(as total dust):15 | |
| | | | mg/m3;TWA(respirable | |
| | | | fraction):5 mg/m3 | |
| CERAMIC FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):0.2 fiber/cc | A2: Suspected human |
| | | | | carcin. |
| Oxide Glass Chemicals | 65997-17-3 | Manufacturer | TWA(as dust):10 mg/m3 | |
| | | determined | | |

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 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

| General Physical Form: | Liquid |
|---|--|
| Specific Physical Form: | Paste |
| Odor, Color, Grade: | Pungent Styrene odor Green paste |
| Odor threshold | No Data Available |
| рН | No Data Available |
| Melting point | No Data Available |
| Boiling Point | 293 °F |
| Flash Point | 88 °F [Test Method:Closed Cup] |
| Evaporation rate | <=1 |
| Flammability (solid, gas) | Not Applicable |
| Flammable Limits(LEL) | 1.1 % [Details:based on styrene] |
| Flammable Limits(UEL) | No Data Available |
| Vapor Pressure | 4.5 mmHg [Details:CONDITIONS: at 20 C] |
| Vapor Density | 3.6 [<i>Ref Std</i> :AIR=1] |
| Density | 1.32 g/ml |
| Specific Gravity | 1.32 [<i>Ref Std</i> :WATER=1] |
| Solubility in Water | Negligible |
| Partition coefficient: n-octanol/ water | No Data Available |
| Autoignition temperature | No Data Available |
| Decomposition temperature | No Data Available |
| Viscosity | No Data Available |
| Hazardous Air Pollutants | 0.476 lb HAPS/lb solids [Test Method:Calculated] |
| Volatile Organic Compounds | 262 g/l [Test Method:calculated SCAQMD rule 443.1] |
| Volatile Organic Compounds | 19.9 % weight [<i>Test Method</i> :calculated per CARB title 2] |
| Percent volatile | 19.9 % weight |
| VOC Less H2O & Exempt Solvents | 262 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. Stable under normal conditions. May become unstable at elevated temperatures and/or pressure.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Light Sparks and/or flames Heat

10.5. Incompatible materials Strong acids Strong bases Strong oxidizing agents Water Alkali and alkaline earth metals

10.6. Hazardous decomposition products

<u>Substance</u>

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:

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:

May be harmful if swallowed.

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

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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

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

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.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| Ingredient | CAS No. | Class Description | Regulation |
|--------------------------|------------|-------------------------------|---|
| Generic: CERAMIC FIBERS | 65997-17-3 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| Generic: CERAMIC FIBERS | 65997-17-3 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| Generic: GLASS FILAMENTS | 65997-17-3 | Anticipated human carcinogen | National Toxicology Program Carcinogens |
| Styrene Monomer | 100-42-5 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| Styrene Monomer | 100-42-5 | Anticipated human carcinogen | National Toxicology Program Carcinogens |

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 | Inhalation- Vapor(4 hr) | | No data available; calculated ATE20 - 50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE2,000 - 5,000 mg/kg |
| Polyester Polymer | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Polyester Polymer | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Talc | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Talc | Ingestion | | LD50 estimated to be > 5,000 mg/kg |
| Styrene Monomer | Dermal | Rat | LD50 > 2,000 mg/kg |
| Styrene Monomer | Inhalation- Vapor (4 hours) | Rat | LC50 8.3 mg/l |
| Styrene Monomer | Ingestion | Rat | LD50 5,000 mg/kg |
| Magnesium Carbonate | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Magnesium Carbonate | Ingestion | Mouse | LD50 > 5,000 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 |
| Chlorite (mineral) | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Chlorite (mineral) | Ingestion | | LD50 estimated to be > 5,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|-----------------|------------|---------------------------|
| | | |
| Talc | Rabbit | No significant irritation |
| Styrene Monomer | official | Mild irritant |
| | classifica | |
| | tion | |

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| Magnesium Carbonate | In vitro data | Minimal irritation |
|-----------------------|-----------------------------------|---------------------------|
| Oxide Glass Chemicals | Professio nal judgeme nt | No significant irritation |
| Chlorite (mineral) | Professio nal judgeme nt | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-----------------------|------------|---------------------------|
| | | |
| Talc | Rabbit | No significant irritation |
| Styrene Monomer | official | Moderate irritant |
| | classifica | |
| | tion | |
| Magnesium Carbonate | Rabbit | Mild irritant |
| Oxide Glass Chemicals | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |
| Chlorite (mineral) | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |

Skin Sensitization

| Name | Species | Value |
|-----------------|---------|----------------|
| Styrene Monomer | Guinea | Not classified |
| | pig | |

Respiratory Sensitization

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

Germ Cell Mutagenicity

| Name | Route | Value |
|-----------------------|----------|--|
| | | |
| Talc | In Vitro | Not mutagenic |
| Talc | In vivo | Not mutagenic |
| 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 |
| Oxide Glass Chemicals | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|-----------------------|------------|----------|--|
| Talc | Inhalation | Rat | Some positive data exist, but the data are not |
| | | | sufficient for classification |
| Styrene Monomer | Ingestion | Mouse | Carcinogenic |
| Styrene Monomer | Inhalation | Human | Carcinogenic |
| | | and | |
| | | animal | |
| Oxide Glass Chemicals | Inhalation | Multiple | Some positive data exist, but the data are not |
| | | animal | sufficient for classification |
| | | species | |

Reproductive Toxicity

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| Name | Route | Value | Species | Test Result | Exposure Duration |
|-----------------|------------|--|-------------------------------|------------------------|-----------------------------|
| Talc | Ingestion | Not classified for development | Rat | NOAEL 1,600 mg/kg | during organogenesi s |
| 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 |

Reproductive and/or Developmental Effects

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 | Some positive data exist, but the data are not sufficient for classification | 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 |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-----------------|------------|--|--|-------------------------------|------------------------|--------------------------|
| 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/m3 | 113 weeks |
| Styrene Monomer | Inhalation | eyes | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | occupational exposure |
| Styrene Monomer | Inhalation | auditory system | May cause damage to organs though prolonged or repeated exposure | Multiple animal species | NOAEL 1.3 mg/l | not available |
| 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 | LOAEL 0.09 | not available |

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| | | | | animal species | mg/l | |
|-----------------------|------------|--|--|-------------------------------|------------------------|--------------------------|
| Styrene Monomer | Inhalation | heart 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 |
| Oxide Glass Chemicals | Inhalation | respiratory system | Not classified | Human | NOAEL not available | occupational exposure |

Aspiration Hazard

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

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Incinerate in a permitted waste incineration facility. As a disposal alternative, Dispose of waste product in a permitted industrial waste 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

3M[™] Dynatron® Dyna-Hair® Long Strand, P.N. 472, 474 10/12/17

Contact 3M for more information.

311/312 Hazard Categories:

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

EPCRA 311/312 Hazard Classifications (effective January 1, 2018):

| Physical Hazards |
|---|
| Flammable (gases, aerosols, liquids, or solids) |
| |

| Health Hazards |
|--|
| Carcinogenicity |
| 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 | 10 - | 30 |

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

| <u>Ingredient</u> | C.A.S. No. | Classification |
|-------------------|-------------------|-----------------------|
| Styrene Monomer | 100-42-5 | Carcinogen |

WARNING: This product contains a chemical known to the State of California to cause cancer.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

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: 1 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.

HMIS Hazard ClassificationHealth: 2Flammability: 3Physical Hazard: 1Personal Protection: X - See PPE section.

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

| Document Group: | 24-6791-8 | Version Number: | 9.00 |
|-----------------|-----------|------------------|----------|
| Issue Date: | 10/12/17 | Supercedes Date: | 11/02/15 |

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Safety Data Sheet

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| Document Group: | 29-5993-0 | Version Number: | 4.00 |
|-----------------|-----------|------------------|----------|
| Issue Date: | 05/22/18 | Supercedes Date: | 09/29/17 |

SECTION 1: Identification

1.1. Product identifier

3M[™] Cream Hardener (Red, White & Blue)

Product Identification Numbers

LB-K100-0965-7, LB-K100-0965-8, LB-K100-0965-9, LB-K100-0966-0, LB-K100-0966-1, LB-K100-0966-2, LB-K100-0966-3, LB-K100-1035-6, LB-K100-1045-4, LB-K100-1286-7, 41-0003-6674-4, 41-0003-6682-7, 41-0003-6685-0, 41-0003-6686-8, 41-0003-6687-6, 41-0003-7901-0, 41-0003-7903-6, 41-0003-7904-4, 41-0003-7922-6, 41-0003-7928-3, 41-0003-7930-9, 41-0003-7931-7, 41-0003-7932-5, 41-0003-7933-3, 41-0003-7935-8, 41-0003-7987-9, 41-0003-8059-6, 41-0003-8072-9, 41-0003-8073-7, 41-0003-8074-5, 41-0003-8146-1, 60-4550-6617-9, 60-4550-6830-8, 60-4550-6981-9, 60-4550-6982-7, 60-4550-8123-6

1.2. Recommended use and restrictions on use

Recommended use Automotive, hardener for body fillers & glazes

| 3M |
|---|
| Automotive Aftermarket |
| 3M Center, St. Paul, MN 55144-1000, USA |
| 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.

2.2. Label elements

Signal word Warning

Symbols

Flame | Exclamation mark |

Pictograms



Hazard Statements Heating may cause a fire.

Causes serious eye irritation. May cause an allergic skin reaction.

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. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves and eye/face protection. 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.

Storage:

Protect from sunlight. Store at temperatures not exceeding 32C/90F. Keep cool. Store away from other materials.

Disposal:

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

8% 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 * |
| Water | 7732-18-5 | 10 - 30 Trade Secret * |

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| Benzoic Acid, C9-11-Branched Alkyl Esters | 131298-44-7 | 10 - 30 Trade Secret * |
|--|-------------|------------------------|
| Zinc Stearate | 557-05-1 | 3 - 7 Trade Secret * |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | 9038-95-3 | 1 - 5 Trade Secret * |
| Calcium Sulfate | 7778-18-9 | 1 - 5 Trade Secret * |
| Iron Oxide (FE2O3) | 1309-37-1 | 1 - 5 Trade Secret * |
| Ferric Ferrocyanide | 14038-43-8 | 0 - 1 Trade Secret * |
| Ferric Ammonium Ferrocyanide | 25869-00-5 | 0 - 1 Trade Secret * |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

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

Eye Contact:

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

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 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.

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Eliminate all ignition sources if safe to do so. 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,

| 3M [™] Cream Hardener (Red, White & Blue) 05/22/18 |
|---|
|---|

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. 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. 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

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

7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed. Protect from sunlight. Store away from heat. 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 |
|--------------------|------------|--------|----------------------------|-------------------------|
| Iron Oxide (FE2O3) | 1309-37-1 | ACGIH | TWA(respirable fraction):5 | A4: Not class. as human |
| | | | mg/m3 | carcin |
| Iron Oxide (FE2O3) | 1309-37-1 | OSHA | OSHA TWA(as fume):10 mg/m3 | |
| CYANIDES | 14038-43-8 | OSHA | TWA(as CN):5 mg/m3 | SKIN |
| 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 |

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| Benzovl Peroxide | 94-36-0 | OSHA | TWA:5 mg/m3 | |
|--|--------------------|------------|-------------|---|
| ACGIH · American Conference of Governn | ental Industrial F | Ivgienists | | 1 |

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Provide ventilation adequate to maintain dust concentration below minimum explosive concentrations. 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: Nitrile Rubber 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 – Nitrile 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

General Physical Form: Specific Physical Form: Odor, Color, Grade: Odor threshold pH Melting point Solid Viscous Red paste with slight ester odor *No Data Available No Data Available No Data Available*

| Boiling Point | No Data Available |
|---|---|
| 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 | Not Applicable |
| Vapor Density | Not Applicable |
| Density | 1.2 g/cm3 |
| Specific Gravity | 1.2 [@, 25 °C] [<i>Ref Std</i> :WATER=1] |
| Solubility in Water | Negligible |
| 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 | No Data Available |
| Hazardous Air Pollutants | 0 lb HAPS/lb solids [Test Method:Calculated] |
| Molecular weight | Not Applicable |
| Volatile Organic Compounds | 0 g/l [Test Method:calculated SCAQMD rule 443.1] |
| Volatile Organic Compounds | 0 % weight [<i>Test Method</i> :calculated per CARB title 2] |
| Percent volatile | 20 % [Details: Water is the volatile component] |
| VOC Less H2O & Exempt Solvents | 0 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. Stable unless exposed to heat, flames and drying conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials Accelerators

10.6. Hazardous decomposition products

<u>Substance</u>

Carbon monoxide Carbon dioxide Toxic Vapor, Gas, Particulate <u>Condition</u> Not Specified Not Specified 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:

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. 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.

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 ATE2,000 - 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 |
| 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 |
| Calcium Sulfate | Dermal | Professio nal judgeme nt | LD50 estimated to be > 5,000 mg/kg |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Dermal | Rabbit | LD50 > 16,960 mg/kg |
| Calcium Sulfate | Ingestion | Rat | LD50 > 5,000 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 |
| Iron Oxide (FE2O3) | Dermal | Not | LD50 3,100 mg/kg |

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| | | available | |
|------------------------------|-----------|-----------|------------------------------------|
| Iron Oxide (FE2O3) | Ingestion | Not | LD50 3,700 mg/kg |
| | | available | |
| 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 |
| Zinc Stearate | Rabbit | No significant irritation |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | | Minimal irritation |
| Iron Oxide (FE2O3) | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|---------|---------------------------|
| | | |
| Benzoyl Peroxide | Rabbit | Severe irritant |
| Zinc Stearate | Rabbit | No significant irritation |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Rabbit | No significant irritation |
| Iron Oxide (FE2O3) | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|--------------------|---------|----------------|
| Benzoyl Peroxide | Guinea | Sensitizing |
| | pig | |
| Iron Oxide (FE2O3) | 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 |
| Iron Oxide (FE2O3) | In Vitro | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|--|------------|----------|--|
| Benzoyl Peroxide | Ingestion | Multiple | Not carcinogenic |
| | | animal | |
| | | species | |
| Benzoyl Peroxide | Dermal | Mouse | Some positive data exist, but the data are not |
| | | | sufficient for classification |
| Oxirane, Polymer with Methyloxirane, Monobutyl Ether | Ingestion | Rat | Not carcinogenic |
| Iron Oxide (FE2O3) | Inhalation | Human | 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 |
| Benzoyl Peroxide | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| Benzoyl Peroxide | Ingestion | Not classified for male reproduction | Rat | NOAEL 500 | premating & |

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| | | | | mg/kg/day | during gestation |
|---|------------|--------------------------------------|-----|------------------------|------------------------------------|
| Benzoyl Peroxide | Ingestion | Not classified for development | Rat | NOAEL 500 mg/kg/day | premating & during gestation |
| 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 |
|--|-----------|-----------------|----------------|---------|------------------------|----------------------|
| 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 |
|--|------------|---|--|---------|-----------------------------|-----------------------|
| 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 |
| Iron Oxide (FE2O3) | Inhalation | pulmonary fibrosis pneumoconiosis | Not classified | Human | NOAEL Not available | occupational exposure |

Aspiration Hazard

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

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

SECTION 12: Ecological information

Ecotoxicological information

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

Chemical fate information

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

SECTION 13: Disposal considerations

13.1. Disposal methods

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

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

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 manufacturer for more information

EPCRA 311/312 Hazard Classifications:

Physical Hazards Organic peroxide Health Hazards

| Respiratory or Skin Sensitization |
|--------------------------------------|
| Serious eye damage or eye irritation |

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

| Ingredient | <u>C.A.S. No</u> | <u>% by Wt</u> |
|--------------------------------|------------------|----------------------|
| Zinc Stearate (ZINC COMPOUNDS) | 557-05-1 | 3 - 7 |
| Benzoyl Peroxide | 94-36-0 | Trade Secret 30 - 60 |
| Ferric Ferrocyanide (CYANIDES) | 14038-43-8 | 0 - 1 |

15.2. State Regulations

Contact manufacturer 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 manufacturer for more information

15.4. International Regulations

Contact manufacturer 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: 2 Instability: 1 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.

HMIS Hazard ClassificationHealth: 2Flammability: 1Physical Hazard: 1Personal Protection: X - See PPE section.

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

| Document Group: | 29-5993-0 | Version Number: | 4.00 |
|-----------------|-----------|------------------|----------|
| Issue Date: | 05/22/18 | Supercedes Date: | 09/29/17 |

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