



## Safety Data Sheet

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|                        |           |                         |          |
|------------------------|-----------|-------------------------|----------|
| <b>Document Group:</b> | 24-2437-2 | <b>Version Number:</b>  | 7.00     |
| <b>Issue Date:</b>     | 09/04/15  | <b>Supersedes Date:</b> | 05/09/14 |

### Product identifier

Bondo® Fiberglass Resin Kit, P.N. 401, 401C, 402, 402M, 402C, 402ES, 402T, 402Z, 404, 404C, 404Z

### ID Number(s):

60-4550-4826-8, 60-4550-5662-6, 60-4550-5663-4, 60-4550-5664-2, 60-4550-5665-9, 60-4550-5666-7, 60-4550-5667-5, 60-4550-6602-1, 60-4550-6603-9, 60-4550-6605-4, 60-4550-6742-5, 60-4550-7373-8, 60-4550-7374-6, 60-4550-7375-3, 60-4550-7376-1, 60-4550-7377-9, 60-4550-8100-4, 60-4550-8101-2, 60-4550-8102-0, 60-4550-8287-9, 60-4550-8288-7, 60-4550-8297-8, 60-4550-8298-6, 60-4550-8299-4, 60-4550-8325-7, 60-4550-8326-5, 60-4550-8327-3, 70-0080-0014-6, 70-0080-0015-3, 70-0080-0016-1, 70-0080-0148-2, 70-0080-0149-0, 70-0080-0150-8, 70-0080-0151-6, 70-0080-0152-4, 70-0080-0153-2

### Recommended use

Automotive, Repairing Auto Body

### Supplier's details

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>MANUFACTURER:</b> | 3M                                      |
| <b>DIVISION:</b>     | Automotive Aftermarket                  |
| <b>ADDRESS:</b>      | 3M Center, St. Paul, MN 55144-1000, USA |
| <b>Telephone:</b>    | 1-888-3M HELPS (1-888-364-3577)         |

### Emergency telephone number

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

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

24-2429-9, 24-2440-6

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|                        |           |                         |          |
|------------------------|-----------|-------------------------|----------|
| <b>Document Group:</b> | 24-2440-6 | <b>Version Number:</b>  | 11.02    |
| <b>Issue Date:</b>     | 04/15/15  | <b>Supersedes Date:</b> | 04/15/15 |

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Bondo® MEKP Liquid Hardener for Fiberglass Resin Kit, P.N. 401, 401C, 402, 402C, 402T, 402Z, 404, 404C, 404Z

#### Product Identification Numbers

LB-K100-0411-2, LB-K100-0414-8, LB-K100-0414-9

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

##### Recommended use

Automotive, Curing Agent

#### 1.3. Supplier's details

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>MANUFACTURER:</b> | 3M                                      |
| <b>DIVISION:</b>     | Automotive Aftermarket                  |
| <b>ADDRESS:</b>      | 3M Center, St. Paul, MN 55144-1000, USA |
| <b>Telephone:</b>    | 1-888-3M HELPS (1-888-364-3577)         |

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

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 D.

Acute Toxicity (oral): Category 4.

Acute Toxicity (inhalation): Category 4.

Serious Eye Damage/Irritation: Category 1.

Skin Corrosion/Irritation: Category 1C.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Flame | Corrosion | Exclamation mark |

## Pictograms



## Hazard Statements

Heating may cause a fire.

Harmful if swallowed.

Causes serious eye damage.

Causes severe skin burns and eye damage.

Harmful if inhaled.

## 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.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing, 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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

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

Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Call a POISON CENTER or doctor/physician if you feel unwell.

### Storage:

Protect from sunlight.

Store at temperatures not exceeding 25C/77F. Keep cool.

Store locked up.

Store away from other materials.

### Disposal:

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

## 2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns.

64% of the mixture consists of ingredients of unknown acute inhalation toxicity.

### SECTION 3: Composition/information on ingredients

| Ingredient                   | C.A.S. No.    | % by Wt                |
|------------------------------|---------------|------------------------|
| Dimethyl Phthalate           | 131-11-3      | 30 - 60 Trade Secret * |
| Methyl Ethyl Ketone Peroxide | 1338-23-4     | 15 - 40 Trade Secret * |
| Phlegmatizer                 | Trade Secret* | 10 - 30 Trade Secret * |
| Methyl Ethyl Ketone          | 78-93-3       | < 3 Trade Secret *     |
| Hydrogen Peroxide            | 7722-84-1     | < 3 Trade Secret *     |
| Water                        | 7732-18-5     | < 3 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 flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

##### Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

##### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for 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.

#### Hazardous Decomposition or By-Products

##### Substance

Carbon monoxide  
Carbon dioxide  
Irritant Vapors or Gases

##### Condition

During Combustion  
During Combustion  
During Combustion

#### 5.3. Special protective actions for fire-fighters

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

prevent explosive rupture.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

### 6.2. Environmental precautions

Avoid release to the environment. 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. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

## 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. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

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

Protect from sunlight. Store at temperatures not exceeding 25C/77F. Keep cool. Keep only in original container. Store away from acids. Store away from oxidizing agents. 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          |
|------------------------------|------------|--------|--------------------------|------------------------------|
| Dimethyl Phthalate           | 131-11-3   | ACGIH  | TWA:5 mg/m3              |                              |
| Dimethyl Phthalate           | 131-11-3   | OSHA   | TWA:5 mg/m3              |                              |
| Methyl Ethyl Ketone Peroxide | 1338-23-4  | ACGIH  | CEIL:0.2 ppm             |                              |
| Hydrogen Peroxide            | 7722-84-1  | ACGIH  | TWA:1 ppm                | A3: Confirmed animal carcin. |
| Hydrogen Peroxide            | 7722-84-1  | OSHA   | TWA:1.4 mg/m3(1 ppm)     |                              |
| Methyl Ethyl Ketone          | 78-93-3    | ACGIH  | TWA:200 ppm;STEL:300 ppm |                              |
| Methyl Ethyl Ketone          | 78-93-3    | OSHA   | TWA:590 mg/m3(200 ppm)   |                              |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines  
 OSHA : United States Department of Labor - Occupational Safety and Health Administration  
 TWA: Time-Weighted-Average  
 STEL: Short Term Exposure Limit  
 CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use 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:

Full Face Shield  
 Indirect Vented Goggles

#### Skin/hand protection

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

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

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

#### 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

|                                  |                                                                          |
|----------------------------------|--------------------------------------------------------------------------|
| <b>General Physical Form:</b>    | Liquid                                                                   |
| <b>Odor, Color, Grade:</b>       | Slight odor. Clear.                                                      |
| <b>Odor threshold</b>            | No Data Available                                                        |
| <b>pH</b>                        | No Data Available                                                        |
| <b>Melting point</b>             | No Data Available                                                        |
| <b>Boiling Point</b>             | 244 °F                                                                   |
| <b>Flash Point</b>               | > 200 °F [Test Method: Closed Cup] [Details: No flash to boiling point.] |
| <b>Evaporation rate</b>          | No Data Available                                                        |
| <b>Flammability (solid, gas)</b> | Not Applicable                                                           |
| <b>Flammable Limits(LEL)</b>     | No Data Available                                                        |

|                                         |                                                      |
|-----------------------------------------|------------------------------------------------------|
| Flammable Limits(UEL)                   | No Data Available                                    |
| Vapor Pressure                          | No Data Available                                    |
| Vapor Density                           | > 1                                                  |
| Density                                 | 1.1 g/ml                                             |
| Specific Gravity                        | 1.1 [Ref Std: WATER=1]                               |
| Solubility In Water                     | No Data Available                                    |
| 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                | 43.1                                                 |
| Volatile Organic Compounds              | 39 g/l [Test Method: calculated SCAQMD rule 443.1]   |
| Volatile Organic Compounds              | 3.5 % weight [Test Method: Tested per ASTM protocol] |
| Percent volatile                        | 45.0 % weight                                        |
| VOC Less H2O & Exempt Solvents          | 39 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

Light  
Sparks and/or flames  
Temperatures above the boiling point

### 10.5. Incompatible materials

Strong oxidizing agents  
Alkali and alkaline earth metals  
Strong acids

### 10.6. Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

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

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

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

##### Inhalation:

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:

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

##### Eye Contact:

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

##### Ingestion:

Harmful if swallowed. Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

#### Additional Health Effects:

##### Single exposure may cause target organ effects:

Dermal Effects: Signs/symptoms may include changes in skin pigmentation and/or coloration.

#### 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 ATE 10 - 20 mg/l      |
| Overall product              | Ingestion                      |            | No data available; calculated ATE 300 - 2,000 mg/kg |
| Dimethyl Phthalate           | Inhalation-Dust/Mist (4 hours) | Other      | LC50 > 15.1 mg/l                                    |
| Dimethyl Phthalate           | Dermal                         | Rabbit     | LD50 > 11,940 mg/kg                                 |
| Dimethyl Phthalate           | Ingestion                      | Rat        | LD50 6,800 mg/kg                                    |
| Methyl Ethyl Ketone Peroxide | Dermal                         | Rabbit     | LD50 4,000 mg/kg                                    |
| Methyl Ethyl Ketone Peroxide | Inhalation-Vapor (4 hours)     | Rat        | LC50 15.4 mg/l                                      |
| Methyl Ethyl Ketone Peroxide | Ingestion                      | Rat        | LD50 484 mg/kg                                      |
| Phlegmatizer                 | Dermal                         | Guinea pig | LD50 > 18,800 mg/kg                                 |
| Phlegmatizer                 | Inhalation-Dust/Mist (4 hours) | Rat        | LC50 > 8 mg/l                                       |
| Phlegmatizer                 | Ingestion                      | Rat        | LD50 > 3,200 mg/kg                                  |
| Methyl Ethyl Ketone          | Dermal                         | Rabbit     | LD50 > 8,050 mg/kg                                  |
| Methyl Ethyl Ketone          | Inhalation-Vapor (4 hours)     | Rat        | LC50 34.5 mg/l                                      |

|                     |                                |        |                    |
|---------------------|--------------------------------|--------|--------------------|
| Methyl Ethyl Ketone | Ingestion                      | Rat    | LD50 2,737 mg/kg   |
| Hydrogen Peroxide   | Dermal                         | Rabbit | LD50 > 2,000 mg/kg |
| Hydrogen Peroxide   | Inhalation-Dust/Mist (4 hours) | Rat    | LC50 2 mg/l        |
| Hydrogen Peroxide   | Ingestion                      | Rat    | LD50 1,193 mg/kg   |

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

| Name                         | Species | Value              |
|------------------------------|---------|--------------------|
| Methyl Ethyl Ketone Peroxide | Rabbit  | Corrosive          |
| Methyl Ethyl Ketone          | Rabbit  | Minimal irritation |
| Hydrogen Peroxide            | Rabbit  | Corrosive          |

### Serious Eye Damage/Irritation

| Name                         | Species | Value           |
|------------------------------|---------|-----------------|
| Methyl Ethyl Ketone Peroxide | Human   | Corrosive       |
| Methyl Ethyl Ketone          | Rabbit  | Severe irritant |
| Hydrogen Peroxide            | Rabbit  | Corrosive       |

### Skin Sensitization

| Name                         | Species    | Value                                                                        |
|------------------------------|------------|------------------------------------------------------------------------------|
| Methyl Ethyl Ketone Peroxide | Human      | Some positive data exist, but the data are not sufficient for classification |
| Hydrogen Peroxide            | Guinea pig | Not sensitizing                                                              |

### 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                                                                        |
|------------------------------|----------|------------------------------------------------------------------------------|
| Methyl Ethyl Ketone Peroxide | In vivo  | Not mutagenic                                                                |
| Methyl Ethyl Ketone Peroxide | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Methyl Ethyl Ketone          | In Vitro | Not mutagenic                                                                |
| Hydrogen Peroxide            | In vivo  | Not mutagenic                                                                |
| Hydrogen Peroxide            | In Vitro | Some positive data exist, but the data are not sufficient for classification |

### Carcinogenicity

| Name                         | Route         | Species                 | Value                                                                        |
|------------------------------|---------------|-------------------------|------------------------------------------------------------------------------|
| Methyl Ethyl Ketone Peroxide | Not Specified | Mouse                   | Some positive data exist, but the data are not sufficient for classification |
| Methyl Ethyl Ketone          | Inhalation    | Human                   | Not carcinogenic                                                             |
| Hydrogen Peroxide            | Dermal        | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| Hydrogen Peroxide            | Ingestion     | 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  |
|------------------------------|-----------|----------------------------------|---------|--------------------|--------------------|
| Methyl Ethyl Ketone Peroxide | Dermal    | Not toxic to female reproduction | Rat     | NOAEL 70 mg/kg/day | 13 weeks           |
| Methyl Ethyl Ketone Peroxide | Ingestion | Not toxic to female reproduction | Rat     | NOAEL 75 mg/kg/day | premating & during |

|                              |            |                                                                                                  |     |                    |                              |
|------------------------------|------------|--------------------------------------------------------------------------------------------------|-----|--------------------|------------------------------|
|                              |            |                                                                                                  |     |                    | gestation                    |
| Methyl Ethyl Ketone Peroxide | Ingestion  | Not toxic to male reproduction                                                                   | Rat | NOAEL 75 mg/kg/day | 28 days                      |
| Methyl Ethyl Ketone Peroxide | Dermal     | Some positive male reproductive data exist, but the data are not sufficient for classification   | Rat | NOAEL 70 mg/kg/day | 13 weeks                     |
| Methyl Ethyl Ketone Peroxide | Ingestion  | Some positive developmental data exist, but the data are not sufficient for classification       | Rat | NOAEL 50 mg/kg/day | premating & during gestation |
| Methyl Ethyl Ketone          | Inhalation | Not toxic to female reproduction                                                                 | Rat | NOAEL 14.7 mg/l    | 90 days                      |
| Methyl Ethyl Ketone          | Inhalation | Not toxic to male reproduction                                                                   | Rat | NOAEL 14.7 mg/l    | 90 days                      |
| Methyl Ethyl Ketone          | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification       | Rat | LOAEL 8.8 mg/l     | during gestation             |
| Hydrogen Peroxide            | Ingestion  | Some positive female reproductive data exist, but the data are not sufficient for classification | Rat | LOAEL 5 mg/kg/day  | 6 months                     |
| Hydrogen Peroxide            | Ingestion  | Some positive male reproductive data exist, but the data are not sufficient for classification   | Rat | LOAEL 5 mg/kg/day  | 6 months                     |
| Hydrogen Peroxide            | Ingestion  | Some positive developmental data exist, but the data are not sufficient for classification       | Rat | LOAEL 5 mg/kg/day  | during gestation             |

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

| Name                         | Route      | Target Organ(s)                   | Value                                                                        | Species                 | Test Result         | Exposure Duration      |
|------------------------------|------------|-----------------------------------|------------------------------------------------------------------------------|-------------------------|---------------------|------------------------|
| Methyl Ethyl Ketone Peroxide | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification |                         | NOAEL Not available |                        |
| Methyl Ethyl Ketone          | Inhalation | central nervous system depression | May cause drowsiness or dizziness                                            | official classification | NOAEL Not available |                        |
| Methyl Ethyl Ketone          | Inhalation | respiratory irritation            | Some positive data exist, but the data are not sufficient for classification | Human                   | NOAEL Not available |                        |
| Methyl Ethyl Ketone          | Ingestion  | liver                             | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL Not available | not applicable         |
| Methyl Ethyl Ketone          | Ingestion  | kidney and/or bladder             | Some positive data exist, but the data are not sufficient for classification | Rat                     | LOAEL 1,080 mg/kg   | not applicable         |
| Hydrogen Peroxide            | Inhalation | respiratory irritation            | May cause respiratory irritation                                             | Human                   | NOAEL Not available |                        |
| Hydrogen Peroxide            | Ingestion  | nervous system                    | Some positive data exist, but the data are not sufficient for classification | Human                   | LOAEL Not available | poisoning and/or abuse |

#### Specific Target Organ Toxicity - repeated exposure

| Name                         | Route     | Target Organ(s)                                                                                                    | Value                                                                        | Species | Test Result        | Exposure Duration |
|------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------|--------------------|-------------------|
| Methyl Ethyl Ketone Peroxide | Dermal    | heart   hematopoietic system   liver   immune system   nervous system   kidney and/or bladder   respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat     | NOAEL 70 mg/kg/day | 13 weeks          |
| Methyl Ethyl Ketone Peroxide | Ingestion | liver   kidney and/or bladder                                                                                      | Some positive data exist, but the data are not sufficient for classification | Rat     | LOAEL 97 mg/kg/day | 7 weeks           |
| Methyl Ethyl Ketone          | Dermal    | nervous system                                                                                                     | All data are negative                                                        | Guinea  | NOAEL Not          | 31 weeks          |

|                     |            |                                                                                                             |                                                                              | pig   | available            |          |
|---------------------|------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------|----------------------|----------|
| Methyl Ethyl Ketone | Inhalation | liver   kidney and/or bladder                                                                               | Some positive data exist, but the data are not sufficient for classification | Rat   | NOAEL 14.7 mg/l      | 90 days  |
| Methyl Ethyl Ketone | Inhalation | heart   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   muscles | All data are negative                                                        | Rat   | NOAEL 14.7 mg/l      | 90 days  |
| Methyl Ethyl Ketone | Ingestion  | liver                                                                                                       | Some positive data exist, but the data are not sufficient for classification | Rat   | NOAEL Not available  | 7 days   |
| Methyl Ethyl Ketone | Ingestion  | nervous system                                                                                              | All data are negative                                                        | Rat   | NOAEL 173 mg/kg/day  | 90 days  |
| Hydrogen Peroxide   | Ingestion  | hematopoietic system                                                                                        | Some positive data exist, but the data are not sufficient for classification | Rat   | NOEL 0.005 mg/kg/day | 6 months |
| Hydrogen Peroxide   | Ingestion  | liver   kidney and/or bladder                                                                               | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL Not available  | 35 weeks |

**Aspiration Hazard**

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

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

**SECTION 12: Ecological information****Ecotoxicological information**

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

**Chemical fate information**

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

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

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

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. As a disposal alternative, Dispose of completely cured (or polymerized) material 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

Contact 3M for more information.

#### 311/312 Hazard Categories:

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

#### 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> |
|--------------------|------------------|----------------|
| Dimethyl Phthalate | 131-11-3         | 30 - 60        |

### 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.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

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

## SECTION 16: Other information

#### NFPA Hazard Classification

**Health: 3   Flammability: 1   Instability: 1   Special Hazards: None**

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

#### HMIS Hazard Classification

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

Hazardous Material Identification System (HMIS® III) 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® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

|                        |           |                         |          |
|------------------------|-----------|-------------------------|----------|
| <b>Document Group:</b> | 24-2440-6 | <b>Version Number:</b>  | 11.02    |
| <b>Issue Date:</b>     | 04/15/15  | <b>Supersedes Date:</b> | 04/15/15 |

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## Safety Data Sheet

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|------------------------|-----------|-------------------------|----------|
| <b>Document Group:</b> | 24-2429-9 | <b>Version Number:</b>  | 5.03     |
| <b>Issue Date:</b>     | 08/04/15  | <b>Supersedes Date:</b> | 05/19/14 |

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Bondo® Fiberglass Resin, P.N. 401, 401C, 402, 402C, 402ES, 402T, 402Z, 404, 404C, 404Z

#### Product Identification Numbers

LB-K100-1567-8, LB-K100-1567-9, LB-K100-1568-0, LB-K100-0410-9, LB-K100-0411-0, LB-K100-0411-1, LB-K100-0537-7, LB-K100-0537-8, LB-K100-0537-9, LB-K100-0538-0, LB-K100-0538-1, LB-K100-0538-2, 41-0003-6688-4

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

##### Recommended use

Automotive, Fiberglass Repair Resin

#### 1.3. Supplier's details

|                      |                                         |
|----------------------|-----------------------------------------|
| <b>MANUFACTURER:</b> | 3M                                      |
| <b>DIVISION:</b>     | Automotive Aftermarket                  |
| <b>ADDRESS:</b>      | 3M Center, St. Paul, MN 55144-1000, USA |
| <b>Telephone:</b>    | 1-888-3M HELPS (1-888-364-3577)         |

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

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 (central nervous system): 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 drowsiness or dizziness.

Suspected of causing cancer.

Causes damage to organs:

liver |

sensory organs |

Causes damage to organs through prolonged or repeated exposure:

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

Call a POISON CENTER or doctor/physician 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 container tightly closed.  
 Keep cool.  
 Store locked up.

**Disposal:**

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

**2.3. Hazards not otherwise classified**

None.

**SECTION 3: Composition/information on ingredients**

| <b>Ingredient</b> | <b>C.A.S. No.</b> | <b>% by Wt</b>           |
|-------------------|-------------------|--------------------------|
| Polyester Polymer | Trade Secret*     | 40 - 70 Trade Secret *   |
| Styrene Monomer   | 100-42-5          | 15 - 40 Trade Secret *   |
| Silica            | 7631-86-9         | 0.5 - 1.5 Trade Secret * |

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

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation:**

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

**Skin Contact:**

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

**Eye Contact:**

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

**If Swallowed:**

Rinse mouth. 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.

**5.3. Special protective actions for fire-fighters**

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

prevent explosive rupture.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

### 6.2. Environmental precautions

Avoid release to the environment. 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

Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. 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.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid eye contact. 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 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        |                                |
| Silica          | 7631-86-9  | CMRG   | TWA(as respirable dust):3 mg/m3 |                                |

|                   |           |      |                                                                               |  |
|-------------------|-----------|------|-------------------------------------------------------------------------------|--|
| SILICA, AMORPHOUS | 7631-86-9 | OSHA | TWA concentration:0.8 mg/m <sup>3</sup> ;TWA:20 millions of particles/cu. ft. |  |
|-------------------|-----------|------|-------------------------------------------------------------------------------|--|

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

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.

Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA)

#### 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

|                                  |                                          |
|----------------------------------|------------------------------------------|
| <b>General Physical Form:</b>    | Liquid                                   |
| <b>Specific Physical Form:</b>   | Paste                                    |
| <b>Odor, Color, Grade:</b>       | Pungent organic odor. Light straw color. |
| <b>Odor threshold</b>            | No Data Available                        |
| <b>pH</b>                        | No Data Available                        |
| <b>Melting point</b>             | No Data Available                        |
| <b>Boiling Point</b>             | 180 °F - 415 °F                          |
| <b>Flash Point</b>               | 88 °F [Test Method: Closed Cup]          |
| <b>Evaporation rate</b>          | [Details: Slower than ether.]            |
| <b>Flammability (solid, gas)</b> | Not Applicable                           |
| <b>Flammable Limits(LEL)</b>     | 1.1 %                                    |

|                                         |                                                          |
|-----------------------------------------|----------------------------------------------------------|
| Flammable Limits(UEL)                   | No Data Available                                        |
| Vapor Pressure                          | 3.45 mmHg                                                |
| Vapor Pressure                          | No Data Available                                        |
| Vapor Density                           | No Data Available                                        |
| Vapor Density                           | No Data Available                                        |
| Density                                 | 1.14 g/ml                                                |
| Specific Gravity                        | 1.14 [Ref Std: WATER=1]                                  |
| Solubility In Water                     | No Data Available                                        |
| 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                | 33.8 lb HAPS/lb solids [Test Method: Calculated]         |
| Volatile Organic Compounds              | 386 g/l [Test Method: calculated SCAQMD rule 443.1]      |
| Volatile Organic Compounds              | 33.8 % weight [Test Method: calculated per CARB title 2] |
| Percent volatile                        | 33.8 % weight                                            |
| VOC Less H2O & Exempt Solvents          | 386 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

Heat

Sparks and/or flames

### 10.5. Incompatible materials

Strong acids

Strong bases

Strong oxidizing agents

### 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:

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.

| <u>Ingredient</u> | <u>CAS No.</u> | <u>Class Description</u>      | <u>Regulation</u>                           |
|-------------------|----------------|-------------------------------|---------------------------------------------|
| 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 ATE 20 - 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-Vapor (4 hours)     | Rat     | LC50 8.3 mg/l                                   |
| Styrene Monomer | Ingestion                      | Rat     | LD50 5,000 mg/kg                                |
| Silica          | Dermal                         | Rabbit  | LD50 > 5,000 mg/kg                              |
| Silica          | Inhalation-Dust/Mist (4 hours) | Rat     | LC50 > 0.691 mg/l                               |
| Silica          | Ingestion                      | Rat     | LD50 > 5,110 mg/kg                              |

ATE = acute toxicity estimate

### Skin Corrosion/Irritation

| Name            | Species                 | Value                     |
|-----------------|-------------------------|---------------------------|
| Styrene Monomer | official classification | Mild irritant             |
| Silica          | Rabbit                  | No significant irritation |

### Serious Eye Damage/Irritation

| Name            | Species                 | Value                     |
|-----------------|-------------------------|---------------------------|
| Styrene Monomer | official classification | Moderate irritant         |
| Silica          | Rabbit                  | No significant irritation |

### Skin Sensitization

| Name            | Species          | Value           |
|-----------------|------------------|-----------------|
| Styrene Monomer | Guinea pig       | Not sensitizing |
| Silica          | Human and animal | Not sensitizing |

### 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                                                                        |
|-----------------|----------|------------------------------------------------------------------------------|
| 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 |
| Silica          | In Vitro | Not mutagenic                                                                |

### Carcinogenicity

| Name            | Route         | Species          | Value                                                                        |
|-----------------|---------------|------------------|------------------------------------------------------------------------------|
| Styrene Monomer | Ingestion     | Mouse            | Carcinogenic                                                                 |
| Styrene Monomer | Inhalation    | Human and animal | Carcinogenic                                                                 |
| Silica          | Not Specified | 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 toxic to female reproduction                                                               | Rat                     | NOAEL 21 mg/kg/day    | 3 generation         |
| Styrene Monomer | Inhalation | Not toxic to female reproduction                                                               | Rat                     | NOAEL 2.1 mg/l        | 2 generation         |
| Styrene Monomer | Inhalation | Not toxic to male reproduction                                                                 | Rat                     | NOAEL 2.1 mg/l        | 2 generation         |
| Styrene Monomer | Ingestion  | Some positive male reproductive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 400 mg/kg/day   | 60 days              |
| Styrene Monomer | Ingestion  | Some positive developmental data exist, but the data are not sufficient for classification     | Rat                     | NOAEL 400 mg/kg/day   | during gestation     |
| Styrene Monomer | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification     | Multiple animal species | NOAEL 2.1 mg/l        | during gestation     |
| Silica          | Ingestion  | Not toxic to female reproduction                                                               | Rat                     | NOAEL 509 mg/kg/day   | 1 generation         |
| Silica          | Ingestion  | Not toxic to male reproduction                                                                 | Rat                     | NOAEL 497 mg/kg/day   | 1 generation         |
| Silica          | Ingestion  | Not toxic to development                                                                       | Rat                     | NOAEL 1,350 mg/kg/day | during organogenesis |

## 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                  | All data are negative                                                        | Rat                     | NOAEL Not available | not available         |
| Styrene Monomer | Inhalation | kidney and/or bladder             | All data are negative                                                        | 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     |
|-----------------|------------|----------------------|------------------------------------------------------------------------------|-------------------------|---------------------|-----------------------|
| 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 through prolonged or repeated exposure            | Multiple animal species | NOAEL 1.3 mg/l      | not available         |
| Styrene Monomer | Inhalation | liver                | May cause damage to organs through 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 | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 0.85 mg/l     | 7 days                |

|                 |            |                                                                           |                                                                              |                         |                     |                       |
|-----------------|------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------|---------------------|-----------------------|
| Styrene Monomer | Inhalation | endocrine system                                                          | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 0.6 mg/l      | 10 days               |
| Styrene Monomer | Inhalation | respiratory system                                                        | Some positive data exist, but the data are not sufficient for classification | Multiple animal species | LOAEL 0.09 mg/l     | not available         |
| Styrene Monomer | Inhalation | heart   bone, teeth, nails, and/or hair   muscles   kidney and/or bladder | All data are negative                                                        | 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                                             | Some positive data exist, but the data are not sufficient for classification | Rat                     | NOAEL 677 mg/kg/day | 6 months              |
| Styrene Monomer | Ingestion  | hematopoietic system                                                      | Some positive data exist, but the data are not sufficient for classification | Dog                     | NOAEL 600 mg/kg/day | 470 days              |
| Styrene Monomer | Ingestion  | heart   respiratory system                                                | All data are negative                                                        | Rat                     | NOAEL 35 mg/kg/day  | 105 weeks             |
| Silica          | Inhalation | respiratory system   silicosis                                            | All data are negative                                                        | 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 uncured product in a permitted waste incineration facility. Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. 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.

#### 311/312 Hazard Categories:

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

#### 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.

### 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:** 2 **Flammability:** 3 **Instability:** 0 **Special Hazards:** None

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

|                        |           |                         |          |
|------------------------|-----------|-------------------------|----------|
| <b>Document Group:</b> | 24-2429-9 | <b>Version Number:</b>  | 5.03     |
| <b>Issue Date:</b>     | 08/04/15  | <b>Supersedes Date:</b> | 05/19/14 |

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