



Safety Data Sheet

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| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 28-0991-1 | Version Number: | 2.01 |
| Issue Date: | 04/27/15 | Supersedes Date: | 03/03/15 |

Product identifier

3M™ Channel Bonding & Sidelite Adhesive PN 08641

ID Number(s):

41-0003-6766-8, 41-0003-7994-5, 60-4550-5244-3

Recommended use

Automotive

Supplier's details

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

Emergency telephone number

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

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

10-5979-9, 10-5978-1

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| | | | |
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| Document Group: | 10-5978-1 | Version Number: | 40.01 |
| Issue Date: | 04/27/15 | Supersedes Date: | 03/03/15 |

SECTION 1: Identification

1.1. Product identifier

3M™ Channel Bonding & Sidelite Adhesive PN 08641 Part B (BASE)

Product Identification Numbers

LB-K100-0780-1, LB-K100-0129-7

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Adhesive for bonding automotive side glass.

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

Serious Eye Damage/Irritation: Category 2B.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 2.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

Causes eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing cancer.

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.
 Avoid breathing dust/fume/gas/mist/vapors/spray.
 Wear protective gloves.
 Wash thoroughly after handling.
 Contaminated work clothing must not be allowed out of the workplace.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 IF ON SKIN: Wash with plenty of soap and water.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

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

2.3. Hazards not otherwise classified

None.

96% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|------------|-------------------------|
| Bisphenol A-Epichlorohydrin Copolymer | 25068-38-6 | 90 - 100 Trade Secret * |
| Dimethyl Siloxane, Reaction Product With Silica | 67762-90-7 | 3 - 7 Trade Secret * |
| Carbon Black | 1333-86-4 | 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:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

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

None inherent in this product.

Hazardous Decomposition or By-Products

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

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. 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. 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

Do not handle until all safety precautions have been read and understood. 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. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|---|------------|--------|---|------------------------------|
| Carbon Black | 1333-86-4 | ACGIH | TWA(inhalable fraction):3 mg/m ³ | A3: Confirmed animal carcin. |
| Carbon Black | 1333-86-4 | CMRG | TWA:0.5 mg/m ³ | |
| Carbon Black | 1333-86-4 | OSHA | TWA:3.5 mg/m ³ | |
| Dimethyl Siloxane, Reaction Product With Silica | 67762-90-7 | CMRG | CEIL:5 mg/m ³ | |
| SILICA, AMORPHOUS | 67762-90-7 | OSHA | TWA concentration:0.8 mg/m ³ ;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.

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: Nitrile Rubber
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: | Black, epoxy odor. |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point | <i>Not Applicable</i> |
| Boiling Point | > 260 °C [<i>Details: Calc from RMs</i>] |
| Flash Point | 249 °C [<i>Test Method: Closed Cup</i>] [<i>Details: Calc from RMs</i>] |
| Evaporation rate | <i>Not Applicable</i> |
| Flammability (solid, gas) | Not Applicable |
| Flammable Limits(LEL) | <i>No Data Available</i> |
| Flammable Limits(UEL) | <i>No Data Available</i> |
| Vapor Pressure | 0.03 mbar [<i>Details: at 77 Deg. C</i>] |
| Vapor Density | <i>Not Applicable</i> |
| Density | 9.8 lb/gal |
| Specific Gravity | 1.180 [<i>Ref Std: WATER=1</i>] |
| Solubility in Water | Slight (less than 10%) |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |
| Autoignition temperature | <i>No Data Available</i> |
| Decomposition temperature | <i>No Data Available</i> |
| Hazardous Air Pollutants | 0.0002 lb HAPS/lb solids [<i>Test Method: Calculated</i>] |
| Volatile Organic Compounds | 1 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>] |
| Volatile Organic Compounds | 0.1 % weight [<i>Test Method: calculated per CARB title 2</i>] |
| Percent volatile | 0.1 |
| VOC Less H2O & Exempt Solvents | 1 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>] |

SECTION 10: Stability and reactivity**10.1. Reactivity**

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products**Substance****Condition**

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:

May be harmful if inhaled. Vapors released during curing may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

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

Ingestion:

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

Additional Health Effects:**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

| <u>Ingredient</u> | <u>CAS No.</u> | <u>Class Description</u> | <u>Regulation</u> |
|--------------------------|-----------------------|---------------------------------|---|
| Carbon Black | 1333-86-4 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|---|--------------------------------|---------|---|
| Overall product | Inhalation-Dust/Mist(4 hr) | | No data available; calculated ATE 5 - 12.5 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE > 5,000 mg/kg |
| Bisphenol A-Epichlorohydrin Copolymer | Dermal | Rat | LD50 > 1,600 mg/kg |
| Bisphenol A-Epichlorohydrin Copolymer | Ingestion | Rat | LD50 > 1,000 mg/kg |
| Dimethyl Siloxane, Reaction Product With Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Dimethyl Siloxane, Reaction Product With Silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Carbon Black | Dermal | Rabbit | LD50 > 3,000 mg/kg |
| Carbon Black | Ingestion | Rat | LD50 > 8,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| Bisphenol A-Epichlorohydrin Copolymer | Rabbit | Mild irritant |
| Dimethyl Siloxane, Reaction Product With Silica | Rabbit | No significant irritation |
| Carbon Black | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| Bisphenol A-Epichlorohydrin Copolymer | Rabbit | Moderate irritant |
| Dimethyl Siloxane, Reaction Product With Silica | Rabbit | No significant irritation |
| Carbon Black | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|---|------------------|-----------------|
| Bisphenol A-Epichlorohydrin Copolymer | Human and animal | Sensitizing |
| Dimethyl Siloxane, Reaction Product With Silica | Human and animal | Not sensitizing |

Respiratory Sensitization

| Name | Species | Value |
|---------------------------------------|---------|--|
| Bisphenol A-Epichlorohydrin Copolymer | Human | Some positive data exist, but the data are not sufficient for classification |

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|--|
| Bisphenol A-Epichlorohydrin Copolymer | In vivo | Not mutagenic |
| Bisphenol A-Epichlorohydrin Copolymer | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Dimethyl Siloxane, Reaction Product With Silica | In Vitro | Not mutagenic |
| Carbon Black | In Vitro | Not mutagenic |
| Carbon Black | In vivo | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|---------------------------------------|--------|---------|--|
| Bisphenol A-Epichlorohydrin Copolymer | Dermal | Mouse | Some positive data exist, but the data are not |

| | | | |
|---|---------------|-------|--|
| | | | sufficient for classification |
| Dimethyl Siloxane, Reaction Product With Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Carbon Black | Dermal | Mouse | Not carcinogenic |
| Carbon Black | Ingestion | Mouse | Not carcinogenic |
| Carbon Black | Inhalation | Rat | Carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|---|-----------|----------------------------------|---------|-----------------------|----------------------|
| Bisphenol A-Epichlorohydrin Copolymer | Ingestion | Not toxic to female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Bisphenol A-Epichlorohydrin Copolymer | Ingestion | Not toxic to male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Bisphenol A-Epichlorohydrin Copolymer | Dermal | Not toxic to development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis |
| Bisphenol A-Epichlorohydrin Copolymer | Ingestion | Not toxic to development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not toxic to female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not toxic to male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not toxic to development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|------------|--|--|---------|-----------------------|-----------------------|
| Bisphenol A-Epichlorohydrin Copolymer | Dermal | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| Bisphenol A-Epichlorohydrin Copolymer | Dermal | nervous system | All data are negative | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| Bisphenol A-Epichlorohydrin Copolymer | Ingestion | auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder | All data are negative | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| Dimethyl Siloxane, Reaction Product With Silica | Inhalation | respiratory system silicosis | All data are negative | Human | NOAEL Not available | occupational exposure |
| Carbon Black | Inhalation | pneumoconiosis | Some positive data exist, but the data are not sufficient for classification | 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 completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. 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 - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

| <u>Ingredient</u> | <u>C.A.S. No.</u> | <u>Classification</u> |
|-------------------|-------------------|---------------------------|
| LEAD | 7439-92-1 | Female reproductive toxin |
| LEAD | 7439-92-1 | Male reproductive toxin |
| LEAD | 7439-92-1 | Carcinogen |
| LEAD | 7439-92-1 | Developmental Toxin |
| Carbon Black | 1333-86-4 | Carcinogen |

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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: 2 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.

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

1.1. Product identifier

3M™Channel Bonding & Sidelite Adhesive PN 08641 - Part A

Product Identification Numbers

LB-K100-0780-2, LB-K100-0129-8

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Adhesive for bonding automotive side glass.

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

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

2.2. Label elements

Signal word

Danger

Symbols

Health Hazard |

Pictograms



Hazard Statements

Causes damage to organs:
 cardiovascular system |
 nervous system |
 kidney/urinary tract |
 respiratory system |

Precautionary Statements

General:

Keep out of reach of children.

Prevention:

Do not breathe dust/fume/gas/mist/vapors/spray.
 Do not eat, drink or smoke when using this product.
 Wash thoroughly after handling.

Response:

IF exposed: Call a POISON CENTER or doctor/physician.
 Specific treatment (see Notes to Physician on this label).

Storage:

Store locked up.

Disposal:

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

Notes to Physician:

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

2.3. Hazards not otherwise classified

None.

93% of the mixture consists of ingredients of unknown acute oral toxicity.

93% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--|---------------|-------------------------|
| Mercaptan-Terminated Epoxy Curing Agent NJ 800938-5952 | Trade Secret* | 60 - 100 Trade Secret * |
| Dimethyl Siloxane, Reaction Product With Silica | 67762-90-7 | 3 - 7 Trade Secret * |
| Ethylene Glycol | 107-21-1 | 1 - 5 Trade Secret * |

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

*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:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1. Information on toxicological effects.

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

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

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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. 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

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.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|---|------------|--------|---|--------------------------------|
| Ethylene Glycol | 107-21-1 | ACGIH | CEIL(as aerosol):100 mg/m ³ | A4: Not class. as human carcin |
| Ethylene Glycol | 107-21-1 | CMRG | CEIL(as vapor and aerosol):100 mg/m ³ | |
| Dimethyl Siloxane, Reaction Product With Silica | 67762-90-7 | CMRG | CEIL:5 mg/m ³ | |
| SILICA, AMORPHOUS | 67762-90-7 | OSHA | TWA concentration:0.8 mg/m ³ ;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.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety Glasses with side shields

Skin/hand protection

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

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

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: | White, pungent odor. |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point | <i>No Data Available</i> |
| Boiling Point | <i>No Data Available</i> |
| Boiling Point | <i>Not Applicable</i> |
| Flash Point | > 200 °F [<i>Test Method: Pensky-Martens Closed Cup</i>] |
| Evaporation rate | <i>Not Applicable</i> |
| Flammability (solid, gas) | Not Applicable |
| Flammable Limits(LEL) | <i>No Data Available</i> |
| Flammable Limits(UEL) | <i>No Data Available</i> |
| Vapor Pressure | <i>Not Applicable</i> |
| Vapor Density | <i>Not Applicable</i> |
| Density | 9.8 lb/gal |
| Specific Gravity | 1.180 [<i>Ref Std: WATER=1</i>] |
| Solubility in Water | Slight (less than 10%) |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |
| Autoignition temperature | <i>No Data Available</i> |
| Decomposition temperature | <i>No Data Available</i> |
| Hazardous Air Pollutants | 2.17 lb HAPS/lb solids [<i>Test Method: Calculated</i>] |
| Volatile Organic Compounds | 23 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>] |
| Volatile Organic Compounds | 1.9 % weight [<i>Test Method: calculated per CARB title 2</i>] |
| Percent volatile | 1.90 % weight |
| VOC Less H2O & Exempt Solvents | 23 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>] |

SECTION 10: Stability and reactivity**10.1. Reactivity**

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|-------------------------------|------------------|
| Carbon monoxide | Not Specified |
| Carbon dioxide | Not Specified |
| Oxides of Nitrogen | Not Specified |
| Oxides of Sulfur | Not Specified |
| Toxic Vapor, Gas, Particulate | 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. Vapors released during curing may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation.

Eye Contact:

Vapors released during curing may cause 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:

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

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

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate,

bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

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

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|---|--------------------------------|---------|---|
| Overall product | Inhalation-Dust/Mist(4 hr) | | No data available; calculated ATE 5 - 12.5 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE > 5,000 mg/kg |
| Dimethyl Siloxane, Reaction Product With Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Dimethyl Siloxane, Reaction Product With Silica | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Ethylene Glycol | Ingestion | Human | LD50 1,600 mg/kg |
| Ethylene Glycol | Inhalation-Dust/Mist (4 hours) | Other | LC50 estimated to be 5 - 12.5 mg/l |
| Ethylene Glycol | Dermal | Rabbit | 9,530 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| Dimethyl Siloxane, Reaction Product With Silica | Rabbit | No significant irritation |
| Ethylene Glycol | Rabbit | Minimal irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| Dimethyl Siloxane, Reaction Product With Silica | Rabbit | No significant irritation |
| Ethylene Glycol | Rabbit | Mild irritant |

Skin Sensitization

| Name | Species | Value |
|---|------------------|--|
| Dimethyl Siloxane, Reaction Product With Silica | Human and animal | Not sensitizing |
| Ethylene Glycol | Human | Some positive data exist, but the data are not sufficient for classification |

Respiratory Sensitization

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

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|---------------|
| Dimethyl Siloxane, Reaction Product With Silica | In Vitro | Not mutagenic |
| Ethylene Glycol | In Vitro | Not mutagenic |
| Ethylene Glycol | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|---|---------------|----------|--|
| Dimethyl Siloxane, Reaction Product With Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Ethylene Glycol | Ingestion | Multiple | Not carcinogenic |

| | | |
|--|----------------|--|
| | animal species | |
|--|----------------|--|

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|---|------------|--|-------------------------|-----------------------|----------------------|
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not toxic to female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not toxic to male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not toxic to development | Rat | NOAEL 1,350 mg/kg/day | during organogenesis |
| Ethylene Glycol | Ingestion | Not toxic to female reproduction | Multiple animal species | NOAEL 1,000 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | Not toxic to male reproduction | Multiple animal species | NOAEL 1,000 mg/kg/day | 2 years |
| Ethylene Glycol | Dermal | Some positive developmental data exist, but the data are not sufficient for classification | Mouse | NOAEL 3,549 mg/kg/day | during organogenesis |
| Ethylene Glycol | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Mouse | LOAEL 750 mg/kg/day | during organogenesis |
| Ethylene Glycol | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Mouse | NOAEL 1,000 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 |
|-----------------|-----------|---|--|---------|---------------------|------------------------|
| Ethylene Glycol | Ingestion | heart nervous system kidney and/or bladder respiratory system | Causes damage to organs | Human | NOAEL Not available | poisoning and/or abuse |
| Ethylene Glycol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| Ethylene Glycol | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | poisoning and/or abuse |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|------------|--|--|-------------------------|------------------------|-----------------------|
| Dimethyl Siloxane, Reaction Product With Silica | Inhalation | respiratory system silicosis | All data are negative | Human | NOAEL Not available | occupational exposure |
| Ethylene Glycol | Ingestion | kidney and/or bladder vascular system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 200 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | heart hematopoietic system liver immune system muscles | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | respiratory system | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL 12,000 mg/kg/day | 2 years |
| Ethylene Glycol | Ingestion | skin endocrine system bone, teeth, nails, and/or hair | All data are negative | Multiple animal species | NOAEL 1,000 mg/kg/day | 2 years |

| | | | | | | |
|--|--|-----------------------|--|--|--|--|
| | | nervous system eyes | | | | |
|--|--|-----------------------|--|--|--|--|

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. 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 - No 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> |
|-------------------|------------------|----------------|
| Ethylene Glycol | 107-21-1 | 1 - 5 |

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

| <u>Ingredient</u> | <u>C.A.S. No.</u> | <u>Classification</u> |
|---------------------------------|--------------------------|------------------------------|
| CHROMIUM (HEXAVALENT COMPOUNDS) | None | Female reproductive toxin |
| CHROMIUM (HEXAVALENT COMPOUNDS) | None | Male reproductive toxin |
| CHROMIUM (HEXAVALENT COMPOUNDS) | None | Carcinogen |
| CHROMIUM (HEXAVALENT COMPOUNDS) | None | Developmental Toxin |
| LEAD | 7439-92-1 | Female reproductive toxin |
| LEAD | 7439-92-1 | Male reproductive toxin |
| LEAD | 7439-92-1 | Carcinogen |
| LEAD | 7439-92-1 | Developmental Toxin |
| CADMIUM | 7440-43-9 | Male reproductive toxin |
| CADMIUM | 7440-43-9 | Carcinogen |
| CADMIUM | 7440-43-9 | Developmental Toxin |

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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: 2 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.

| | | | |
|------------------------|-----------|-------------------------|----------|
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