

Safety Data Sheet

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| Document group: | 07-1664-7 | Version number: | 25.00 |
|-----------------|------------|------------------|------------|
| Issue Date: | 2022/01/05 | Supercedes Date: | 2020/10/27 |

SECTION 1: Identification

1.1. Product identifier

3M[™] Panel Bonding Adhesive PN 08115

Product Identification Numbers

| LB-K100-0825-1 | 41-0003-6745-2 | 41-0003-8009-1 | 41-0003-8082-8 | 41-9103-0505-5 |
|----------------|----------------|----------------|----------------|----------------|
| 60-4550-5237-7 | 60-4550-6968-6 | 60-9800-2447-9 | 60-9800-2450-3 | 60-9800-3093-0 |
| 60-9800-3246-4 | 60-9800-4425-3 | 60-9800-4450-1 | 60-9801-0532-8 | FJ-9600-0102-4 |
| FS-9100-3423-0 | FS-9100-3424-8 | FS-9100-3425-5 | FS-9100-5376-8 | GT-6000-1859-9 |
| H0-0019-4491-9 | JS-4000-0056-3 | JS-4000-0079-5 | JS-4000-0085-2 | UU-0083-3979-6 |
| UU-0089-1497-8 | UU-0089-1498-6 | UU-0109-9945-4 | UU-0110-2845-1 | |

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Adhesive

1.3. Supplier's details

| Company: | 3M Canada Company | |
|-----------|--|---------|
| Division: | Automotive Aftermarket | |
| Address: | 1840 Oxford Street East, Post Office Box 5757, London, Ontario | N6A 4T1 |

| Telephone: | (800) 364-3577 |
|------------|----------------|
| E Mail: | |

1.4. Emergency telephone number

Medical Emergency Telephone:1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS) or Article Information Sheet (AIS) 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:

32-4327-6, 09-3599-9

Transport in accordance with applicable regulations.

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer MAKES NO WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF PERFORMANCE, COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M Canada SDSs are available at www.3M.ca



Safety Data Sheet

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| Document group: | 09-3599-9 | Version number: | 24.01 |
|-----------------|------------|------------------|------------|
| Issue Date: | 2022/11/14 | Supercedes Date: | 2022/01/05 |

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

| SECTION 1 | : Identification | | | | | |
|---|--|----------------|-----------------------|-------------|--|--|
| 1111111000000100100 | 1.1. Product identifier3M[™] Panel Bonding (90 Minutes) Adhesive Part A (Accelerator) PN 08115 | | | | | |
| Product Identificatio LB-K00-1246-4 | on Numbers LB-K100-0010-6 | LB-K100-0781-5 | LB-K100-0903-3 | GBCDMS00400 | | |
| 1.2. Recommended | d use and restrictions | on use | | | | |
| Intended Use Automotive | | | | | | |
| Specific Use Use with Part B, M | SDS 32-4327-6 | | | | | |
| Restrictions on us Not applicable | e | | | | | |
| 1.3. Supplier's det | ails | | | | | |
| Company: Division: Address: Telephone: Website: | 3M Canada Compa Automotive Aftern 1840 Oxford Street (800) 364-3577 www.3M.ca | narket | 5757, London, Ontario | N6A 4T1 | | |
| 1.4. Emergency tel | lephone number | | | | | |

Medical Emergency Telephone:1-800-3M HELPS / 1-800-364-3577; Transportation Emergency Telephone (CANUTEC): (613) 996-6666

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 1. Skin Corrosion/Irritation: Category 1B. Skin Sensitizer: Category 1B. Reproductive Toxicity: Category 1B. Specific Target Organ Toxicity (single exposure): Category 1. Specific Target Organ Toxicity (single exposure): Category 3.

2.2. Label elements Signal word

Danger

Symbols

Corrosion | Exclamation mark | Health Hazard |





Hazard statements

Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause drowsiness or dizziness. May damage fertility or the unborn child.

Causes damage to organs: blood or blood-forming organs

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. Do not breathe dust/fume/gas/mist/vapours/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 exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Specific treatment (see Notes to Physician on this label).

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

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

Notes to Physician:

Overexposure to this product may result in methemoglobinemia. Methemoglobinemia may be clinically suspected by the presence of clinical "cyanosis" in the presence of a normal PaO2 (as obtained by arterial blood gases). Routine pulse oximetry may be inaccurate for monitoring oxygen saturation in the presence of methemoglobinemia, and should not be used to make the diagnosis of this disorder. If the patient is symptomatic or if the methemoglobin level is >20%, specific therapy with methylene blue should be considered as part of the medical management.

2.3. Other hazards

May cause chemical gastrointestinal burns.

1% of the mixture consists of ingredients of unknown acute dermal toxicity.

SECTION 3: Composition/information on ingredients

This material is a mixture.

| Ingredient | C.A.S. No. | % by Wt | Common Name |
|--------------------------------------|------------|------------------------|---|
| Polymeric Diamide | 68911-25-1 | 30 - 60 Trade Secret * | Fatty acids, C18-unsatd., dimers, polymers with 3,3'-[oxybis(2,1-ethanediyloxy)]bis[1- propanamine] |
| Butadiene Acrylonitrile Copolymer | 68683-29-4 | 10 - 30 Trade Secret * | 2-Propenenitrile, polymer with 1,3- butadiene, 1-cyano-1-methyl-4-oxo-4-[[2- (1-piperazinyl)ethyl]a mino]butyl- terminated |
| Fused Silica | 60676-86-0 | 10 - 30 | Silica, vitreous |
| Tris(2,4,6- | 90-72-2 | 5 - 10 Trade Secret * | Phenol, 2,4,6-tris[(dimethylamino)methyl]- |
| Dimethylaminomonomethyl)Phe | | | |
| nol | | | |
| Bis(3-Aminopropyl) Ether of | 4246-51-9 | 0 - 6.1 | 1-Propanamine, 3,3'-[oxybis(2,1- |
| Diethylene Glycol | | | ethanediyloxy)]bis- |
| Amine Epoxy Curing Agent | 288-32-4 | 1 - 5 Trade Secret * | 1H-Imidazole |
| Dimethyl Siloxane, Reaction | 67762-90-7 | 1 - 5 | Siloxanes and Silicones, di-Me, reaction |
| Product with Silica | | | products with silica |
| Nitric acid, ammonium calcium | 15245-12-2 | 1 - 5 Trade Secret * | No Data Available |
| salt | | | |
| Bis[(Dimethylamino)Methyl]Ph | 71074-89-0 | 0.1 - 1.5 | Phenol, bis[(dimethylamino)methyl]- |
| enol | | | |
| N-Aminoethylpiperazine | 140-31-8 | 0.1 - 1.5 | 1-Piperazineethanamine |
| Toluene | 108-88-3 | 0 - 0.33 | No Data Available |

*The actual concentration of this ingredient 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

Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Allergic skin reaction (redness, swelling, blistering, and itching). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details.

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

Overexposure to this product may result in methemoglobinemia. Methemoglobinemia may be clinically suspected by the presence of clinical "cyanosis" in the presence of a normal PaO2 (as obtained by arterial blood gases). Routine pulse oximetry may be inaccurate for monitoring oxygen saturation in the presence of methemoglobinemia, and should not be used to make the diagnosis of this disorder. If the patient is symptomatic or if the methemoglobin level is >20%, specific therapy with methylene blue 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.

Hazardous Decomposition or By-Products

| <u>Substance</u> | <u>Condition</u> |
|------------------|-------------------|
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |

5.3. Special protective actions for fire-fighters

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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 vapours, 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

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. 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 in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments | |
|--|------------|--------|------------|---------------------|--|
| Toluene | 108-88-3 | ACGIH | TWA:20 ppm | | |
| ACCILL: A mariage Conference of Covernmental Industrial Ultraionista | | | | | |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association CMRG : Chemical Manufacturer's Recommended Guidelines

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/vapours/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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

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

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours 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

| Physical state | Liquid | | |
|---|---|--|--|
| Specific Physical Form: | Viscous liquid | | |
| | | | |
| Colour | Tan | | |
| Odour | Slight Amine | | |
| Odour threshold | No Data Available | | |
| рН | Not Applicable | | |
| Melting point/Freezing point | Not Applicable | | |
| Boiling point | >=110 °C | | |
| Flash Point | 110 °C [Test Method:Closed Cup] | | |
| Evaporation rate | <=1 [<i>Ref Std</i> :BUOAC=1] | | |
| Flammability (solid, gas) | Not Applicable | | |
| Flammable Limits(LEL) | No Data Available | | |
| Flammable Limits(UEL) | No Data Available | | |
| Vapour Pressure | <=26,664.4 Pa [@ 20 °C] | | |
| Vapour Density and/or Relative Vapour Density | No Data Available | | |
| Density | 1.2 g/ml | | |
| Density | 1.2 kg/l | | |
| Relative density | 1.2 [<i>Ref Std</i> :WATER=1] | | |
| Water solubility | No Data Available | | |
| 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/Kinematic Viscosity | 100,000 mPa-s - 225,000 mPa-s [Test Method: Brookfield] | | |
| Volatile Organic Compounds | 4 g/l [Test Method:calculated SCAQMD rule 443.1] | | |
| Volatile Organic Compounds | 0.4 % weight [<i>Test Method</i> :calculated per CARB title 2] | | |
| Percent volatile | 0.4 % weight | | |
| VOC Less H2O & Exempt Solvents | 4 g/l [Test Method:calculated SCAQMD rule 443.1] | | |
| Molecular weight | No Data Available | | |

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Substance None known. **Condition**

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin Contact:

May be harmful in contact with skin. Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

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

Ingestion:

May be 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. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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

Reproductive/Developmental Toxicity:

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

Additional Information:

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|-------------------|-----------|---------|---|
| Overall product | Dermal | | No data available; calculated ATE >2,000 - =5,000 |
| | | | mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >2,000 - =5,000 |
| | | | mg/kg |
| Polymeric Diamide | Dermal | Rat | LD50 > 2,000 mg/kg |

| Polymeric Diamide | Ingestion | Rat | LD50 > 2,000 mg/kg |
|---|---------------------------------------|--------------------------|--|
| Fused Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Fused Silica | Inhalation- Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Fused Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Butadiene Acrylonitrile Copolymer | Dermal | Rabbit | LD50 > 3,000 mg/kg |
| Butadiene Acrylonitrile Copolymer | Ingestion | Rat | LD50 > 15,300 mg/kg |
| Tris(2,4,6-Dimethylaminomonomethyl)Phenol | Dermal | Rat | LD50 1,280 mg/kg |
| Tris(2,4,6-Dimethylaminomonomethyl)Phenol | Ingestion | Rat | LD50 1,000 mg/kg |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Dermal | Rabbit | LD50 2,525 mg/kg |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Ingestion | Rat | LD50 2,850 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 |
| Amine Epoxy Curing Agent | Ingestion | Rat | LD50 970 mg/kg |
| Amine Epoxy Curing Agent | Dermal | similar compoun ds | LD50 400 mg/kg |
| Nitric acid, ammonium calcium salt | Ingestion | Rat | LD50 >300, <2000 mg/kg |
| Nitric acid, ammonium calcium salt | Dermal | similar compoun ds | LD50 > 2,000 mg/kg |
| Bis[(Dimethylamino)Methyl]Phenol | Ingestion | | LD50 estimated to be 300 - 2,000 mg/kg |
| N-Aminoethylpiperazine | Dermal | Rabbit | LD50 865 mg/kg |
| N-Aminoethylpiperazine | Ingestion | Rat | LD50 1,470 mg/kg |
| Toluene | Dermal | Rat | LD50 12,000 mg/kg |
| Toluene | Inhalation- Vapor (4 hours) | Rat | LC50 30 mg/l |
| Toluene | Ingestion | Rat | LD50 5,550 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| | | |
| Overall product | Rabbit | Corrosive |
| Polymeric Diamide | Rat | Irritant |
| Fused Silica | Rabbit | No significant irritation |
| Butadiene Acrylonitrile Copolymer | Rabbit | Irritant |
| Tris(2,4,6-Dimethylaminomonomethyl)Phenol | Rabbit | Corrosive |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Rabbit | Corrosive |
| Dimethyl Siloxane, Reaction Product with Silica | Rabbit | No significant irritation |
| Amine Epoxy Curing Agent | Rabbit | Corrosive |
| Nitric acid, ammonium calcium salt | similar | No significant irritation |
| | compoun | |
| | ds | |
| Bis[(Dimethylamino)Methyl]Phenol | similar | Corrosive |
| | compoun | |
| | ds | |
| N-Aminoethylpiperazine | Rabbit | Corrosive |
| Toluene | Rabbit | Irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-------------------|----------|---------------------------|
| | | |
| Overall product | similar | Corrosive |
| | health | |
| | hazards | |
| Polymeric Diamide | In vitro | Severe irritant |
| | data | |
| Fused Silica | Rabbit | No significant irritation |

| Butadiene Acrylonitrile Copolymer | Rabbit | Mild irritant |
|---|---------|---------------------------|
| Tris(2,4,6-Dimethylaminomonomethyl)Phenol | Rabbit | Corrosive |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Rabbit | Corrosive |
| Dimethyl Siloxane, Reaction Product with Silica | Rabbit | No significant irritation |
| Amine Epoxy Curing Agent | Rabbit | Corrosive |
| Nitric acid, ammonium calcium salt | Rabbit | Corrosive |
| Bis[(Dimethylamino)Methyl]Phenol | similar | Corrosive |
| | compoun | |
| | ds | |
| N-Aminoethylpiperazine | Rabbit | Corrosive |
| Toluene | Rabbit | Moderate irritant |

Skin Sensitization

| Name | Species | Value |
|---|-----------|----------------|
| Overall product | Guinea | Sensitizing |
| | pig | |
| Polymeric Diamide | Guinea | Sensitizing |
| | pig | |
| Fused Silica | Human | Not classified |
| | and | |
| | animal | |
| Butadiene Acrylonitrile Copolymer | Guinea | Sensitizing |
| | pig | |
| Tris(2,4,6-Dimethylaminomonomethyl)Phenol | Guinea | Not classified |
| | pig | |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Professio | Sensitizing |
| | nal | |
| | judgeme | |
| | nt | |
| Dimethyl Siloxane, Reaction Product with Silica | Human | Not classified |
| | and | |
| | animal | |
| Nitric acid, ammonium calcium salt | Mouse | Not classified |
| N-Aminoethylpiperazine | Guinea | Sensitizing |
| | pig | |
| Toluene | Guinea | Not classified |
| | pig | |

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 |
|---|----------|--|
| | | |
| Polymeric Diamide | In Vitro | Not mutagenic |
| Fused Silica | In Vitro | Not mutagenic |
| Tris(2,4,6-Dimethylaminomonomethyl)Phenol | In Vitro | Not mutagenic |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | In Vitro | Not mutagenic |
| Dimethyl Siloxane, Reaction Product with Silica | In Vitro | Not mutagenic |
| Amine Epoxy Curing Agent | In Vitro | Not mutagenic |
| Amine Epoxy Curing Agent | In vivo | Not mutagenic |
| Nitric acid, ammonium calcium salt | In Vitro | Not mutagenic |
| N-Aminoethylpiperazine | In vivo | Not mutagenic |
| N-Aminoethylpiperazine | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| Toluene | In Vitro | Not mutagenic |
| Toluene | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|---|-----------|---------|--|
| Fused Silica | Not | Mouse | Some positive data exist, but the data are not |
| | Specified | | sufficient for classification |
| Dimethyl Siloxane, Reaction Product with Silica | Not | Mouse | Some positive data exist, but the data are not |
| | Specified | | sufficient for classification |

| Toluene | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
|---------|------------|-------|--|
| Toluene | Ingestion | Rat | Some positive data exist, but the data are not sufficient for classification |
| Toluene | Inhalation | Mouse | Some positive data exist, but the data are not sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|--|------------|--|---------|--------------------------|------------------------------------|
| Polymeric Diamide | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating into lactation |
| Polymeric Diamide | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 29 days |
| Polymeric Diamide | Ingestion | Not classified for development | Rat | NOAEL 1,000 mg/kg/day | premating into lactation |
| Fused Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Fused Silica | Inhalation | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Fused Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Ingestion | Not classified for female reproduction | Rat | NOAEL 600 mg/kg/day | premating into lactation |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Ingestion | Not classified for male reproduction | Rat | NOAEL 600 mg/kg/day | 59 days |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Ingestion | Not classified for development | Rat | NOAEL 600 mg/kg/day | premating into lactation |
| Dimethyl Siloxane, Reaction Product with Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product with Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product with Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |
| Amine Epoxy Curing Agent | Ingestion | Toxic to development | Rat | NOAEL 60 mg/kg/day | during organogenesi s |
| N-Aminoethylpiperazine | Ingestion | Not classified for female reproduction | Rat | NOAEL 598 mg/kg/day | premating & during gestation |
| N-Aminoethylpiperazine | Ingestion | Not classified for male reproduction | Rat | NOAEL 409 mg/kg/day | 32 days |
| N-Aminoethylpiperazine | Ingestion | Toxic to development | Rabbit | NOAEL 75 mg/kg/day | during gestation |
| Toluene | Inhalation | Not classified for female reproduction | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | Not classified for male reproduction | Rat | NOAEL 2.3 mg/l | 1 generation |
| Toluene | Ingestion | Toxic to development | Rat | LOAEL 520 mg/kg/day | during gestation |
| Toluene | Inhalation | Toxic to development | Human | NOAEL Not available | poisoning and/or abuse |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|-------------------|------------|------------------------|--|------------------------------|------------------------|----------------------|
| Polymeric Diamide | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | Irritation Positive | |

| Polymeric Diamide | Ingestion | central nervous | May cause drowsiness or | Rat | NOAEL Not | |
|---|------------|--------------------------------------|--|------------------------------|------------------------|---------------------------|
| - | - | system depression | dizziness | | available | |
| Butadiene Acrylonitrile | Inhalation | respiratory irritation | Some positive data exist, but the | similar | NOAEL not | |
| Copolymer | | | data are not sufficient for classification | health hazards | available | |
| Tris(2,4,6- Dimethylaminomonomethy l)Phenol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| Amine Epoxy Curing Agent | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| Nitric acid, ammonium calcium salt | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| Nitric acid, ammonium calcium salt | Ingestion | methemoglobinemi a | Causes damage to organs | similar compoun ds | NOAEL Not available | |
| N-Aminoethylpiperazine | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |
| Toluene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Toluene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Toluene | Inhalation | immune system | Not classified | Mouse | NOAEL 0.004 mg/l | 3 hours |
| Toluene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | 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 |
|---|------------|---|----------------|---------|-----------------------------|-----------------------|
| Polymeric Diamide | Ingestion | heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 29 days |
| Fused Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Tris(2,4,6- Dimethylaminomonomethy I)Phenol | Dermal | skin liver nervous system auditory system hematopoietic system eyes | Not classified | Rat | NOAEL 125 mg/kg/day | 28 days |
| Bis(3-Aminopropyl) Ether of Diethylene Glycol | Ingestion | gastrointestinal tract heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory | Not classified | Rat | NOAEL 600 mg/kg/day | 59 days |

| | | system vascular | | | | |
|---|------------|--|--|-------------------------------|-----------------------------|---------------------------|
| | | system | | | | |
| Dimethyl Siloxane, Reaction Product with Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Amine Epoxy Curing Agent | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 60 mg/kg/day | 90 days |
| Amine Epoxy Curing Agent | Ingestion | heart liver blood nervous system eyes | Not classified | Rat | NOAEL 180 mg/kg/day | 90 days |
| N-Aminoethylpiperazine | Dermal | skin | Not classified | Rat | NOAEL 100 mg/kg/day | 29 days |
| N-Aminoethylpiperazine | Dermal | hematopoietic system nervous system kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 29 days |
| N-Aminoethylpiperazine | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | NOAEL 0.2 mg/m3 | 13 weeks |
| N-Aminoethylpiperazine | Inhalation | hematopoietic system eyes kidney and/or bladder | Not classified | Rat | NOAEL 53.8 mg/m3 | 13 weeks |
| N-Aminoethylpiperazine | Ingestion | heart endocrine system hematopoietic system liver nervous system kidney and/or bladder | Not classified | Rat | NOAEL 598 mg/kg/day | 28 days |
| Toluene | Inhalation | auditory system eyes olfactory system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | nervous system | May cause damage to organs though prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 2.3 mg/l | 15 months |
| Toluene | Inhalation | heart liver kidney and/or bladder | Not classified | Rat | NOAEL 11.3 mg/l | 15 weeks |
| Toluene | Inhalation | endocrine system | Not classified | Rat | NOAEL 1.1 mg/l | 4 weeks |
| Toluene | Inhalation | immune system | Not classified | Mouse | NOAEL Not available | 20 days |
| Toluene | Inhalation | bone, teeth, nails, and/or hair | Not classified | Mouse | NOAEL 1.1 mg/l | 8 weeks |
| Toluene | Inhalation | hematopoietic system vascular system | Not classified | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | gastrointestinal tract | Not classified | Multiple animal species | NOAEL 11.3 mg/l | 15 weeks |
| Toluene | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 625 mg/kg/day | 13 weeks |
| Toluene | Ingestion | heart | Not classified | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | liver kidney and/or bladder | Not classified | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | hematopoietic system | Not classified | Mouse | NOAEL 600 mg/kg/day | 14 days |
| Toluene | Ingestion | endocrine system | Not classified | Mouse | NOAEL 105 mg/kg/day | 28 days |
| Toluene | Ingestion | immune system | Not classified | Mouse | NOAEL 105 mg/kg/day | 4 weeks |

Aspiration Hazard Value Name Value Toluene Aspiration hazard

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

SECTION 12: Ecological information

No data available.

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. 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. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

SECTION 16: Other information

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.

Health: 3 Flammability: 1 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.

| Document group: | 09-3599-9 | Version number: | 24.01 |
|-----------------|------------|------------------|------------|
| Issue Date: | 2022/11/14 | Supercedes Date: | 2022/01/05 |

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Safety Data Sheet

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| Document group: | 32-4327-6 | Version number: | 4.00 |
|-----------------|------------|------------------|------------|
| Issue Date: | 2022/01/05 | Supercedes Date: | 2020/10/08 |

This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Regulations.

| SECTION 1: Identification | | | | | |
|--|---|----------------------|-------------------------|-----------------------------|--|
| 1.1. Product identifie 3M [™] Panel Bonding | er Adhesive Part B PN 5 | 58115 | | | |
| Product Identification LB-K100-0010-5 | Numbers LB-K100-0781-6 | LB-K100-0903-4 | LB-K100-1246-7 | GBCDMS00401 | |
| 1.2. Recommended u | use and restrictions o | n use | | | |
| Intended Use Automotive | | | | | |
| Specific Use Structural Panel Bond | ling Adhesive | | | | |
| Restrictions on use Not applicable | | | | | |
| 1.3. Supplier's detail | ls | | | | |
| Company: Division: Address: Telephone: Website: | 3M Canada Compar Automotive Afterma 1840 Oxford Street (800) 364-3577 www.3M.ca | arket | 757, London, Ontario | N6A 4T1 | |
| 1.4. Emergency telep Medical Emergency 7 (613) 996-6666 | | HELPS / 1-800-364-35 | 77; Transportation Emer | rgency Telephone (CANUTEC): | |

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2A. Skin Corrosion/Irritation: Category 2. Skin Sensitizer: Category 1. Reproductive Toxicity: Category 1B. Carcinogenicity: Category 2. Germ Cell Mutagenicity: Category 2.

2.2. Label elements Signal word Danger

Symbols Exclamation mark | Health Hazard |





Hazard statements

Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. May damage fertility or the unborn child. Suspected of causing cancer. Suspected of causing genetic defects.

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/vapours/spray. Wear protective gloves and eye/face protection. Wash exposed skin 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. Take off contaminated clothing and wash it 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. Other hazards

None known.

12% of the mixture consists of ingredients of unknown acute dermal toxicity.92% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

This material is a mixture.

| Ingredient | C.A.S. No. | % by Wt | Common Name |
|------------------------------|------------|------------------------|--|
| 4,4'-isopropylidenediphenol- | 25068-38-6 | 30 - 60 Trade Secret * | Phenol, 4,4'-(1-methylethylidene)bis-, |
| epichlorohydrin polymer | | | polymer with (chloromethyl)oxirane |

| Oxide Glass Chemicals | 65997-17-3 | 10 - 30 | Glass, oxide, chemicals |
|-----------------------------|--------------|------------------------|--|
| 1,4-Bis[(2,3- | 14228-73-0 | 7 - 13 Trade Secret * | Oxirane, 2,2'-[1,4- |
| Epoxypropoxy)Methyl]Cyclohe | | | cyclohexanediylbis(methyleneoxymethylen |
| xane | | | e)]bis- |
| Fused Silica | 60676-86-0 | 7 - 13 | Silica, vitreous |
| Acrylate Polymer | Trade Secret | 1 - 11 | Not Applicable |
| Silica | 7631-86-9 | 1 - 5 | Silica |
| 3-(Trimethoxysilyl)propyl | 2530-83-8 | 0.5 - 1.5 | Silane, trimethoxy[3- |
| Glycidyl Ether | | | (oxiranylmethoxy)propyl]- |
| Dimethyl Siloxane, Reaction | 67762-90-7 | 0.5 - 1.5 | Siloxanes and Silicones, di-Me, reaction |
| Product With Silica | | | products with silica |
| Carbon Black | 1333-86-4 | 0.1 - 1 Trade Secret * | Carbon black |
| Toluene | 108-88-3 | 0 - 0.2 | No Data Available |

Acrylate Polymer is a non-hazardous Trade Secret material according to WHMIS criteria.

*The actual concentration of this ingredient has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

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

Eye Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:

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

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

Allergic skin reaction (redness, swelling, blistering, and itching).

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.

5.3. Special protective actions for fire-fighters

Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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 vapours, 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

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. 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 in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/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. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

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 |
|------------------------------|------------|----------------------------|--|----------------------------|
| Toluene | 108-88-3 | ACGIH | TWA:20 ppm | |
| Carbon Black | 1333-86-4 | ACGIH | IH TWA(inhalable fraction):3 mg/m3 | |
| CERAMIC FIBERS | 65997-17-3 | ACGIH | TWA(as fiber):0.2 fiber/cc | |
| Oxide Glass Chemicals | 65997-17-3 | Manufacturer determined | TWA(as non-fibrous, respirable)(8 hours):3 mg/m3;TWA(as non-fibrous, inhalable fraction)(8 hours):10 mg/m3 | |
| Special purpose glass fibers | 65997-17-3 | ACGIH | TWA(as fiber):1 fiber/cc | |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Skin/hand protection

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

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

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours 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

| Physical state | Liquid | | | |
|---|---|--|--|--|
| Colour | Black | | | |
| Odour | Acrylic | | | |
| Odour threshold | No Data Available | | | |
| рН | No Data Available | | | |
| Melting point/Freezing point | No Data Available | | | |
| Boiling point | >= 35 °C | | | |
| Flash Point | >= 104.4 °C [<i>Test Method</i> :Closed Cup] | | | |
| Evaporation rate | <= 1 Units not available or not applicable [<i>Ref Std</i> :BUOAC=1] | | | |
| Flammability (solid, gas) | Not Applicable | | | |
| Flammable Limits(LEL) | No Data Available | | | |
| Flammable Limits(UEL) | No Data Available | | | |
| Vapour Pressure | <= 186,158.4 Pa | | | |
| Vapour Density and/or Relative Vapour Density | No Data Available | | | |
| Density | 1 kg/l | | | |
| Density | 0.96 g/ml | | | |
| Relative density | 0.96 [<i>Ref Std</i> :WATER=1] | | | |
| Water solubility | 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/Kinematic Viscosity | 100,000 mPa-s - 225,000 mPa-s [Test Method:Brookfield] | | | |
| Volatile Organic Compounds | 15 g/l [Test Method:calculated SCAQMD rule 443.1] | | | |
| Volatile Organic Compounds | 1.6 % weight [Test Method: calculated per CARB title 2] | | | |
| Percent volatile | 1.6 % weight | | | |
| VOC Less H2O & Exempt Solvents | 15 g/l [Test Method: calculated SCAQMD rule 443.1] | | | |
| Molecular weight | No Data Available | | | |

Nanoparticles

This material contains nanoparticles.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Sparks and/or flames

10.5. Incompatible materials

Amines Strong acids Strong bases Strong oxidizing agents

10.6. Hazardous decomposition products

| <u>Substance</u> | |
|-------------------|--|
| Aldehydes | |
| Carbon monoxide | |
| Carbon dioxide | |
| Hydrogen Chloride | |

<u>Condition</u> Not Specified Not Specified Not Specified Not Specified

SECTION 11: Toxicological information

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

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation:

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:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. May cause additional health effects (see below).

Eye Contact:

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

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May cause additional health effects (see below).

Additional Health Effects:

Reproductive/Developmental Toxicity:

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

Genotoxicity:

Genotoxicity and Mutagenicity: May interact with genetic material and possibly alter gene expression.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| Ingredient | CAS No. | Class Description | Regulation |
|--------------|-----------|-------------------------------|---|
| 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 | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| 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 |
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | Dermal | Rat | LD50 > 1,600 mg/kg |
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | Ingestion | Rat | LD50 > 1,000 mg/kg |
| Oxide Glass Chemicals | Dermal | | LD50 estimated to be $> 5,000 \text{ mg/kg}$ |
| Oxide Glass Chemicals | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Fused Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 1,4-Bis[(2,3-Epoxypropoxy)Methyl]Cyclohexane | Ingestion | Rat | LD50 1,000 mg/kg |
| Fused Silica | Inhalation- Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Fused Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Acrylate Polymer | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Acrylate Polymer | 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 |

| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Dermal | Rabbit | LD50 4,000 mg/kg |
|---|-------------|--------|--------------------|
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Inhalation- | Rat | LC50 > 5.3 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Ingestion | Rat | LD50 7,010 mg/kg |
| Dimethyl Siloxane, Reaction Product With Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Dimethyl Siloxane, Reaction Product With Silica | Inhalation- | Rat | LC50 > 0.691 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| 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 |
| Toluene | Dermal | Rat | LD50 12,000 mg/kg |
| Toluene | Inhalation- | Rat | LC50 30 mg/l |
| | Vapor (4 | | |
| | hours) | | |
| Toluene | Ingestion | Rat | LD50 5,550 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|-----------|---------------------------|
| | | |
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | Rabbit | Mild irritant |
| Oxide Glass Chemicals | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |
| 1,4-Bis[(2,3-Epoxypropoxy)Methyl]Cyclohexane | In vitro | Irritant |
| | data | |
| Fused Silica | Rabbit | No significant irritation |
| Acrylate Polymer | Professio | Minimal irritation |
| | nal | |
| | judgeme | |
| | nt | |
| Silica | Rabbit | No significant irritation |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Rabbit | Mild irritant |
| Dimethyl Siloxane, Reaction Product With Silica | Rabbit | No significant irritation |
| Carbon Black | Rabbit | No significant irritation |
| Toluene | Rabbit | Irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|-----------|---------------------------|
| | | |
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | Rabbit | Moderate irritant |
| Oxide Glass Chemicals | Professio | No significant irritation |
| | nal | |
| | judgeme | |
| | nt | |
| 1,4-Bis[(2,3-Epoxypropoxy)Methyl]Cyclohexane | In vitro | No significant irritation |
| | data | |
| Fused Silica | Rabbit | No significant irritation |
| Acrylate Polymer | Professio | Mild irritant |
| | nal | |
| | judgeme | |
| | nt | |
| Silica | Rabbit | No significant irritation |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Rabbit | Corrosive |
| Dimethyl Siloxane, Reaction Product With Silica | Rabbit | No significant irritation |
| Carbon Black | Rabbit | No significant irritation |
| Toluene | Rabbit | Moderate irritant |

Skin Sensitization

| Name | Species | Value |
|---|---------|-------------|
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | Human | Sensitizing |
| | and | |

| | animal | |
|---|---------|----------------|
| 1,4-Bis[(2,3-Epoxypropoxy)Methyl]Cyclohexane | similar | Sensitizing |
| | compoun | |
| | ds | |
| Fused Silica | Human | Not classified |
| | and | |
| | animal | |
| Silica | Human | Not classified |
| | and | |
| | animal | |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Guinea | Not classified |
| | pig | |
| Dimethyl Siloxane, Reaction Product With Silica | Human | Not classified |
| | and | |
| | animal | |
| Toluene | Guinea | Not classified |
| | pig | |

Respiratory Sensitization

| Name | Species | Value |
|---|---------|----------------|
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | Human | Not classified |

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|--|
| 4.4'-isopropylidenediphenol-epichlorohydrin polymer | In vivo | Not mutagenic |
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Oxide Glass Chemicals | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 1,4-Bis[(2,3-Epoxypropoxy)Methyl]Cyclohexane | In Vitro | Mutagenic; structurally related to germ cell mutagens |
| Fused Silica | In Vitro | Not mutagenic |
| Silica | In Vitro | Not mutagenic |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | In vivo | Not mutagenic |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | 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 |
| Toluene | In Vitro | Not mutagenic |
| Toluene | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|---|------------------|-------------------------------|--|
| 4,4'-isopropylidenediphenol-epichlorohydrin polymer | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Oxide Glass Chemicals | Inhalation | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| Fused Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Dermal | Mouse | Not carcinogenic |
| 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 |
| Toluene | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Toluene | Ingestion | Rat | Some positive data exist, but the data are not |

| | | | sufficient for classification |
|---------|------------|-------|--|
| Toluene | Inhalation | Mouse | Some positive data exist, but the data are not |
| | | | sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|------------|--|---------|--------------------------|-----------------------------|
| 4,4'-isopropylidenediphenol- epichlorohydrin polymer | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| 4,4'-isopropylidenediphenol- epichlorohydrin polymer | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| 4,4-isopropylidenediphenol- epichlorohydrin polymer | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesi s |
| 4,4'-isopropylidenediphenol- epichlorohydrin polymer | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Fused Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Fused Silica | Inhalation | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Fused Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |
| Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Ingestion | Not classified for female reproduction | Rat | NOAEL 1,000 mg/kg/day | 1 generation |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 1 generation |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Ingestion | Not classified for development | Rat | NOAEL 3,000 mg/kg/day | during organogenesi s |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Dimethyl Siloxane, Reaction Product With Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |
| Toluene | Inhalation | Not classified for female reproduction | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | Not classified for male reproduction | Rat | NOAEL 2.3 mg/l | 1 generation |
| Toluene | Ingestion | Toxic to development | Rat | LOAEL 520 mg/kg/day | during gestation |
| Toluene | Inhalation | Toxic to development | Human | NOAEL Not available | poisoning and/or abuse |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|--|------------|--------------------------------------|--|------------------------------|------------------------|----------------------|
| 1,4-Bis[(2,3- Epoxypropoxy)Methyl]Cyc lohexane | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | similar health hazards | NOAEL Not available | |
| Toluene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |

| Toluene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
|---------|------------|--------------------------------------|--|-------|------------------------|---------------------------|
| Toluene | Inhalation | immune system | Not classified | Mouse | NOAEL 0.004 mg/l | 3 hours |
| Toluene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | 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 |
|---|------------|--|--|--------------------|-----------------------------|---------------------------|
| 4,4'- isopropylidenediphenol- epichlorohydrin polymer | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| 4,4'- isopropylidenediphenol- epichlorohydrin polymer | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| 4,4'- isopropylidenediphenol- epichlorohydrin polymer | Ingestion | auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| Oxide Glass Chemicals | Inhalation | respiratory system | Not classified | Human | NOAEL not available | occupational exposure |
| Fused Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| 3-(Trimethoxysilyl)propyl Glycidyl Ether | Ingestion | heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| Dimethyl Siloxane, Reaction Product With Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Carbon Black | Inhalation | pneumoconiosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | auditory system eyes olfactory system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | nervous system | May cause damage to organs though prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 2.3 mg/l | 15 months |
| Toluene | Inhalation | heart liver kidney and/or bladder | Not classified | Rat | NOAEL 11.3 mg/l | 15 weeks |
| Toluene | Inhalation | endocrine system | Not classified | Rat | NOAEL 1.1 mg/l | 4 weeks |
| Toluene | Inhalation | immune system | Not classified | Mouse | NOAEL Not available | 20 days |
| Toluene | Inhalation | bone, teeth, nails, and/or hair | Not classified | Mouse | NOAEL 1.1 mg/l | 8 weeks |
| Toluene | Inhalation | hematopoietic system vascular system | Not classified | Human | NOAEL Not available | occupational exposure |
| Toluene | Inhalation | gastrointestinal tract | Not classified | Multiple animal | NOAEL 11.3 mg/l | 15 weeks |

| | | | | species | | |
|---------|-----------|----------------------------------|--|-------------------------------|-----------------------------|----------|
| Toluene | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 625 mg/kg/day | 13 weeks |
| Toluene | Ingestion | heart | Not classified | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | liver kidney and/or bladder | Not classified | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks |
| Toluene | Ingestion | hematopoietic system | Not classified | Mouse | NOAEL 600 mg/kg/day | 14 days |
| Toluene | Ingestion | endocrine system | Not classified | Mouse | NOAEL 105 mg/kg/day | 28 days |
| Toluene | Ingestion | immune system | Not classified | Mouse | NOAEL 105 mg/kg/day | 4 weeks |

Aspiration Hazard

| Name | Value |
|---------|-------------------|
| Toluene | Aspiration hazard |

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

SECTION 12: Ecological information

No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. 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. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain

restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Industrial Safety and Health Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

SECTION 16: Other information

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.

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

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

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