



## Safety Data Sheet

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<b>Issue Date:</b>	05/04/16	<b>Supersedes Date:</b>	02/09/15

### Product identifier

3M Scotchkote Epoxy Ceramic Surfacer CR 511 (N) Kit (Grey)

### ID Number(s):

GR-2001-3338-1, GR-2001-4407-3, GR-2001-4410-7

### Recommended use

Coating, Ceramic fluid flow coating.

### Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	3M United Kingdom Electrical Markets Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

### Emergency telephone number

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

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

32-4070-2, 32-4069-4

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### SECTION 1: Identification

#### 1.1. Product identifier

3M Scotchkote Epoxy Ceramic Surfacer CR 511 (N) Pt A (Grey)

#### Product Identification Numbers

GR-2001-4401-6, GR-2001-4405-7

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

##### Recommended use

Coating, Ceramic fluid flow coating.

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	3M United Kingdom Electrical Markets Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2B.

Skin Sensitizer: Category 1.

Carcinogenicity: Category 1A.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Exclamation mark | Health Hazard |

##### Pictograms

**Hazard Statements**

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

**Precautionary Statements****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.

## SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	28064-14-4	30 - 35 Trade Secret *
BARIUM SULFATE	7727-43-7	15 - 20 Trade Secret *
SILICON CARBIDE	409-21-2	15 - 20 Trade Secret *
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	25068-38-6	10 - 15 Trade Secret *
TITANIUM DIOXIDE	13463-67-7	10 - 15 Trade Secret *
ALKYL(C10-C16)GLYCIDYL ETHER	68081-84-5	1 - 10 Trade Secret *
NON-HAZARDOUS INGREDIENTS	Mixture	1 - 5
QUARTZ SILICA	14808-60-7	< 1 Trade Secret *
CARBON BLACK	1333-86-4	< 1 Trade Secret *

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

secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation:

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

#### Skin Contact:

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

#### Eye Contact:

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

##### Substance

Aldehydes  
Carbon monoxide  
Carbon dioxide

##### Condition

During Combustion  
During Combustion  
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**

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.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. 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**

Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Keep from freezing. 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.

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
CARBON BLACK	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	A3: Confirmed animal carcin.
CARBON BLACK	1333-86-4	CMRG	TWA:0.5 mg/m3	
CARBON BLACK	1333-86-4	OSHA	TWA:3.5 mg/m3	
TITANIUM DIOXIDE	13463-67-7	ACGIH	TWA:10 mg/m3	A4: Not class. as human carcin
TITANIUM DIOXIDE	13463-67-7	CMRG	TWA(as respirable dust):5 mg/m3	
TITANIUM DIOXIDE	13463-67-7	OSHA	TWA(as total dust):15 mg/m3	
QUARTZ SILICA	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m3	A2: Suspected human carcin.
QUARTZ SILICA	14808-60-7	OSHA	TWA concentration(as total dust):0.3 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.)	
SILICON CARBIDE	409-21-2	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable fraction):5 mg/m3	
BARIUM SULFATE	7727-43-7	ACGIH	TWA(inhalable fraction):5 mg/m3	
BARIUM SULFATE	7727-43-7	OSHA	TWA(as total dust):15 mg/m3;TWA(respirable	

fraction):5 mg/m3

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

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

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

Indirect Vented Goggles

#### Skin/hand protection

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

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

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

#### Respiratory protection

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

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Liquid
<b>Specific Physical Form:</b>	Thixotropic liquid.
<b>Odor, Color, Grade:</b>	Faint epoxy odor; Grey color
<b>Odor threshold</b>	No Data Available
<b>pH</b>	No Data Available
<b>Melting point</b>	Not Applicable
<b>Boiling Point</b>	> 240 °C
<b>Flash Point</b>	240 °C [Test Method: Closed Cup]
<b>Evaporation rate</b>	No Data Available
<b>Flammability (solid, gas)</b>	Not Applicable

Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	<=0.1 mmHg
Vapor Density	No Data Available
Density	1.720 g/ml
Specific Gravity	1.720 [Ref Std: WATER=1]
Solubility in Water	Negligible
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	>=400 °C
Decomposition temperature	No Data Available
Viscosity	No Data Available
Volatile Organic Compounds	70.823 g/l [Test Method: tested per EPA method 24] [Details: (Parts A and B mixed)]

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

### 10.5. Incompatible materials

Accelerators

Amines

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Strong acids

Strong bases

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:

No health effects are expected.

##### 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><b>Ingredient</b></u>	<u><b>CAS No.</b></u>	<u><b>Class Description</b></u>	<u><b>Regulation</b></u>
CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
SILICON CARBIDE	409-21-2	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
TITANIUM DIOXIDE	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

#### Toxicological Data

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

#### Acute Toxicity

<u><b>Name</b></u>	<u><b>Route</b></u>	<u><b>Species</b></u>	<u><b>Value</b></u>
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	Dermal	Rabbit	LD50 > 6,000 mg/kg
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	Ingestion	Rat	LD50 > 4,000 mg/kg
BARIUM SULFATE	Dermal		LD50 estimated to be > 5,000 mg/kg
BARIUM SULFATE	Ingestion	Rat	LD50 > 15,000 mg/kg
SILICON CARBIDE	Dermal	Rat	LD50 > 2,000 mg/kg
SILICON CARBIDE	Ingestion	Rat	LD50 > 2,000 mg/kg
TITANIUM DIOXIDE	Dermal	Rabbit	LD50 > 10,000 mg/kg
TITANIUM DIOXIDE	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
TITANIUM DIOXIDE	Ingestion	Rat	LD50 > 10,000 mg/kg
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Dermal	Rat	LD50 > 1,600 mg/kg
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Ingestion	Rat	LD50 > 1,000 mg/kg
ALKYL(C10-C16)GLYCIDYL ETHER	Dermal		LD50 estimated to be > 5,000 mg/kg
ALKYL(C10-C16)GLYCIDYL ETHER	Ingestion	Rat	LD50 > 5,000 mg/kg
CARBON BLACK	Dermal	Rabbit	LD50 > 3,000 mg/kg
CARBON BLACK	Ingestion	Rat	LD50 > 8,000 mg/kg

QUARTZ SILICA	Dermal	LD50 estimated to be > 5,000 mg/kg
QUARTZ SILICA	Ingestion	LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	Rabbit	Minimal irritation
SILICON CARBIDE	Rat	No significant irritation
TITANIUM DIOXIDE	Rabbit	No significant irritation
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Rabbit	Mild irritant
CARBON BLACK	Rabbit	No significant irritation
QUARTZ SILICA	Professional judgement	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	Rabbit	Mild irritant
BARIUM SULFATE	Rabbit	No significant irritation
SILICON CARBIDE	Professional judgement	No significant irritation
TITANIUM DIOXIDE	Rabbit	No significant irritation
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Rabbit	Moderate irritant
CARBON BLACK	Rabbit	No significant irritation

**Skin Sensitization**

Name	Species	Value
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	Human and animal	Sensitizing
TITANIUM DIOXIDE	Human and animal	Not sensitizing
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Human and animal	Sensitizing

**Respiratory Sensitization**

Name	Species	Value
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Human	Some positive data exist, but the data are not sufficient for classification

**Germ Cell Mutagenicity**

Name	Route	Value
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	In Vitro	Some positive data exist, but the data are not sufficient for classification
TITANIUM DIOXIDE	In Vitro	Not mutagenic
TITANIUM DIOXIDE	In vivo	Not mutagenic
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	In vivo	Not mutagenic
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	In Vitro	Some positive data exist, but the data are not sufficient for classification
CARBON BLACK	In Vitro	Not mutagenic
CARBON BLACK	In vivo	Some positive data exist, but the data are not sufficient for classification
QUARTZ SILICA	In Vitro	Some positive data exist, but the data are not sufficient for classification

QUARTZ SILICA	In vivo	Some positive data exist, but the data are not sufficient for classification
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### Carcinogenicity

Name	Route	Species	Value
TITANIUM DIOXIDE	Ingestion	Multiple animal species	Not carcinogenic
TITANIUM DIOXIDE	Inhalation	Rat	Carcinogenic
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Dermal	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
QUARTZ SILICA	Inhalation	Human and animal	Carcinogenic

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Ingestion	Not toxic to female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Ingestion	Not toxic to male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Dermal	Not toxic to development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Ingestion	Not toxic to development	Rat	NOAEL 750 mg/kg/day	2 generation

### 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
BARIUM SULFATE	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
TITANIUM DIOXIDE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
TITANIUM DIOXIDE	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	2 years
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Dermal	nervous system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROXYDRIN POLYMER	Ingestion	auditory system   heart   endocrine system   hematopoietic system   liver   eyes   kidney and/or	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days

		bladder				
CARBON BLACK	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
QUARTZ SILICA	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

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

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

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

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

**Chemical fate information**

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

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

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

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

**EPA Hazardous Waste Number (RCRA):** D009 (Mercury)

**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.

### 15.3. Chemical Inventories

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 product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical 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 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 chemical notification requirements of TSCA.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

<b>This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.</b>
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## SECTION 16: Other information

### NFPA Hazard Classification

**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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## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M Scotchkote Epoxy Ceramic Surfacer CR 511 (N) Pt B

#### Product Identification Numbers

GR-2001-4398-4, GR-2001-4399-2

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

##### Recommended use

Coating, Ceramic fluid flow coating.

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	3M United Kingdom Electrical Markets Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Acute Toxicity (oral): Category 4.  
Acute Toxicity (inhalation): Category 4.  
Serious Eye Damage/Irritation: Category 1.  
Skin Corrosion/Irritation: Category 1B.  
Skin Sensitizer: Category 1.  
Reproductive Toxicity: Category 2.  
Specific Target Organ Toxicity (central nervous system): Category 3.  
Specific Target Organ Toxicity (repeated exposure): Category 2.

#### 2.2. Label elements

##### Signal word

Danger

## Symbols

Corrosion | Exclamation mark | Health Hazard |

## Pictograms



## Hazard Statements

Harmful if swallowed.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Harmful if inhaled.  
May cause drowsiness or dizziness.  
Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure:  
liver |  
musculoskeletal system |

## Precautionary Statements

### 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/vapors/spray.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves, protective clothing, and eye/face protection.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.  
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/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 CENTER 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.  
IF exposed or concerned: Get medical advice/attention.  
Specific treatment (see Notes to Physician on this label).  
Get medical advice/attention if you feel unwell.

### 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.

## 2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns. Persons previously sensitized to amines may develop a cross-sensitization

reaction to certain other amines.

71% of the mixture consists of ingredients of unknown acute dermal toxicity.

46% of the mixture consists of ingredients of unknown acute inhalation toxicity.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
BENZYL ALCOHOL	100-51-6	30 - 60 Trade Secret *
FORMALDEHYDE, POLYMER WITH BENZENEAMINE, HYDROGENATED	135108-88-2	20 - 30 Trade Secret *
FORMALDEHYDE-PHENOL-M-XYLENEDIAMINE COPOLYMER	57214-10-5	10 - 20 Trade Secret *
M-PHENYLENEBIS(METHYLAMINE)	1477-55-0	5 - 15 Trade Secret *
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	1761-71-3	1 - 5 Trade Secret *
SALICYLIC ACID	69-72-7	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 flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

##### Eye Contact:

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

##### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

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

#### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

#### Hazardous Decomposition or By-Products



**Substance**

Carbon monoxide  
Carbon dioxide  
Oxides of Nitrogen

**Condition**

During Combustion  
During Combustion  
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.

**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.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. 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 to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from areas where product may come into contact with food or pharmaceuticals. 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.

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
BENZYL ALCOHOL	100-51-6	AIHA	TWA:44.2 mg/m3(10 ppm)	
M-PHENYLENEBIS(METHYLAMINE)	1477-55-0	ACGIH	CEIL:0.1 mg/m3	Skin Notation

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

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

## 8.2. Exposure controls

### 8.2.1. Engineering controls

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

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

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

Full Face Shield  
Indirect Vented Goggles

#### Skin/hand protection

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

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

#### Respiratory protection

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

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Liquid
<b>Odor, Color, Grade:</b>	Ammonia Odor, Amber Color
<b>Odor threshold</b>	No Data Available
<b>pH</b>	> 8 [Details: Alkaline]
<b>Melting point</b>	Not Applicable
<b>Boiling Point</b>	107.22 - 222 °C
<b>Flash Point</b>	>=104 °C [Test Method: Closed Cup]
<b>Evaporation rate</b>	No Data Available
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Flammable Limits(LEL)</b>	No Data Available

<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	0.7 - 7.5 mmHg [ @ 25 °C]
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	1.080 g/ml
<b>Specific Gravity</b>	1.080 [Ref Std: WATER=1]
<b>Solubility In Water</b>	0 %
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	<i>No Data Available</i>
<b>Volatile Organic Compounds</b>	70 g/l - 76 g/l [Test Method: tested per EPA method 24] [Details: (Parts A and B mixed)]

## 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

Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke.

### 10.5. Incompatible materials

Amines

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Strong acids

Strong bases

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:

Harmful if inhaled. Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

### Skin Contact:

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

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:

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:

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

### Prolonged or repeated exposure may cause target organ effects:

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

Muscular Effects: Signs/symptoms may include generalized muscle weakness, paralysis and atrophy.

### 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 > 5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE 1 - 5 mg/l
Overall product	Ingestion		No data available; calculated ATE 300 - 2,000 mg/kg
BENZYL ALCOHOL	Inhalation-Dust/Mist	Rat	LC50 8.8 mg/l

	(4 hours)		
BENZYL ALCOHOL	Ingestion	Rat	LD50 1,230 mg/kg
M-PHENYLENEBIS(METHYLAMINE)	Dermal	Rabbit	LD50 > 2,000 mg/kg
M-PHENYLENEBIS(METHYLAMINE)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 1.2 mg/l
M-PHENYLENEBIS(METHYLAMINE)	Ingestion	Rat	LD50 980 mg/kg
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	Dermal	Rabbit	LD50 2,110 mg/kg
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	Ingestion	Rat	LD50 350 mg/kg
SALICYLIC ACID	Dermal	Rat	LD50 > 2,000 mg/kg
SALICYLIC ACID	Ingestion	Rat	LD50 891 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
BENZYL ALCOHOL	Multiple animal species	Mild irritant
M-PHENYLENEBIS(METHYLAMINE)	Rat	Corrosive
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	Rabbit	Corrosive
SALICYLIC ACID	Rabbit	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
BENZYL ALCOHOL	Rabbit	Severe irritant
M-PHENYLENEBIS(METHYLAMINE)	Rabbit	Corrosive
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	Rabbit	Corrosive
SALICYLIC ACID	Rabbit	Corrosive

#### Skin Sensitization

Name	Species	Value
BENZYL ALCOHOL	Human and animal	Some positive data exist, but the data are not sufficient for classification
M-PHENYLENEBIS(METHYLAMINE)	Guinea pig	Sensitizing
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	Guinea pig	Sensitizing
SALICYLIC ACID	Mouse	Not sensitizing

#### Photosensitization

Name	Species	Value
SALICYLIC ACID	Mouse	Not sensitizing

#### Respiratory Sensitization

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

#### Germ Cell Mutagenicity

Name	Route	Value
BENZYL ALCOHOL	In vivo	Not mutagenic
BENZYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
M-PHENYLENEBIS(METHYLAMINE)	In Vitro	Not mutagenic
M-PHENYLENEBIS(METHYLAMINE)	In vivo	Not mutagenic
SALICYLIC ACID	In Vitro	Not mutagenic
SALICYLIC ACID	In vivo	Not mutagenic

#### Carcinogenicity

Name	Route	Species	Value
BENZYL ALCOHOL	Ingestion	Multiple animal species	Not carcinogenic

## Reproductive Toxicity

### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
BENZYL ALCOHOL	Ingestion	Not toxic to development	Mouse	NOAEL 550 mg/kg/day	during organogenesis
M-PHENYLENEBIS(METHYLAMINE)	Ingestion	Not toxic to female reproduction	Rat	NOAEL 450 mg/kg/day	1 generation
M-PHENYLENEBIS(METHYLAMINE)	Ingestion	Not toxic to male reproduction	Rat	NOAEL 450 mg/kg	1 generation
M-PHENYLENEBIS(METHYLAMINE)	Ingestion	Not toxic to development	Rat	NOAEL 450 mg/kg/day	1 generation
SALICYLIC ACID	Ingestion	Toxic to development	Rat	NOAEL 75 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
BENZYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
BENZYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
BENZYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
M-PHENYLENEBIS(METHYLAMINE)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Not available	NOAEL Not available	
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	

### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
BENZYL ALCOHOL	Ingestion	endocrine system   muscles   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 400 mg/kg/day	13 weeks
BENZYL ALCOHOL	Ingestion	nervous system   respiratory system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 645 mg/kg/day	8 days
M-PHENYLENEBIS(METHYLAMINE)	Ingestion	endocrine system   blood   bone marrow	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 600 mg/kg/day	28 days
4,4-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE)	Ingestion	liver   muscles	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 15 mg/kg/day	36 days
SALICYLIC ACID	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 500 mg/kg/day	3 days

## Aspiration Hazard

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

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

## SECTION 12: Ecological information

### Ecotoxicological information

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

### Chemical fate information

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

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

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

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

**EPA Hazardous Waste Number (RCRA):** Not regulated

## SECTION 14: Transport Information

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

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

### 311/312 Hazard Categories:

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

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

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 China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

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: 4 Flammability: 2 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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