



## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M Scotchkote Pipe Renewal Liner 2400 Part B (Activator)

#### Product Identification Numbers

GR-2001-3495-9, GR-2001-4113-7

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

##### Recommended use

Coating, Internal in-situ pipe coating.

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	3M United Kingdom Infrastructure Protection 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

Corrosive to metal: Category 1.  
Acute Toxicity (oral): Category 4.  
Serious Eye Damage/Irritation: Category 1.  
Skin Corrosion/Irritation: Category 1B.  
Skin Sensitizer: Category 1.  
Specific Target Organ Toxicity (single exposure): Category 1.

#### 2.2. Label elements

##### Signal word

Danger

##### Symbols

Corrosion | Exclamation mark | Health Hazard |

**Pictograms****Hazard Statements**

May be corrosive to metals.

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Causes damage to organs:

nervous system |

**Precautionary Statements****Prevention:**

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors/spray.

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Absorb spillage to prevent material damage.

**Storage:**

Store in a corrosive resistant container with a resistant inner liner.

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.

## SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
NON-HAZARDOUS INGREDIENTS	Mixture	65 - 75 Trade Secret *
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-	154279-60-4	25 - 35 Trade Secret *

METHYLPROPYL)-		
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	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  
Hydrogen Cyanide  
Oxides of Nitrogen

#### Condition

During Combustion  
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. Refer to other sections of this SDS for information regarding physical and

health hazards, respiratory protection, ventilation, and personal protective equipment.

## 6.2. Environmental precautions

Avoid release to the environment.

## 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Clean up residue. Cover, but do not seal for 48 hours. 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 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.)

## 7.2. Conditions for safe storage including any incompatibilities

Keep only in original container. Store in a corrosive resistant container with a resistant inner liner. 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
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	154279-60-4	Manufacturer determined	TWA-PEG:0.16 mg/m <sup>3</sup>	Sensitizer
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	CMRG	CEIL:5 mg/m <sup>3</sup>	

TWA-PEG - The 8-hour, TWA Provisional Exposure Guideline was established using currently available health hazard data. For more information, contact the address or phone number listed on the first page of the SDS.

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: 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 vapors and particulates

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

#### Thermal hazards

Wear heat insulating gloves when handling hot material to prevent thermal burns.

## SECTION 9: Physical and chemical properties

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

<b>General Physical Form:</b>	Solid
<b>Specific Physical Form:</b>	Thixotropic Paste
<b>Odor, Color, Grade:</b>	Amine-like odor; Black color
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Boiling Point</b>	>=355 °C
<b>Flash Point</b>	>=180 °C [ <i>Test Method:</i> Pensky-Martens Closed Cup]
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Not Classified
<b>Flammable Limits(LEL)</b>	<i>Not Applicable</i>
<b>Flammable Limits(UEL)</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<=0.1 mmHg [@ 20 °C]
<b>Vapor Density</b>	>=1 [ <i>Ref Std:</i> AIR=1]
<b>Density</b>	<i>No Data Available</i>
<b>Specific Gravity</b>	1.730
<b>Solubility in Water</b>	Negligible
<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>	300 °C
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	<i>No Data Available</i>

**Molecular weight**

No Data Available

**Volatile Organic Compounds**

&lt; 15 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**

None known.

**10.5. Incompatible materials**

Strong oxidizing agents

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

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

**SECTION 11: Toxicological information**

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

**11.1. Information on Toxicological effects****Signs and Symptoms of Exposure**

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

**Inhalation:**

Vapors from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**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:

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:

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

#### 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 300 - 2,000 mg/kg
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Dermal	Rat	LD50 > 1,600 mg/kg
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	Rat	LD50 227 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

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Rabbit	Corrosive
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	similar health hazards	Corrosive
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation

#### Skin Sensitization

Name	Species	Value
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Mouse	Sensitizing
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Human and animal	Not sensitizing

#### Respiratory Sensitization

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

**Germ Cell Mutagenicity**

Name	Route	Value
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	In vivo	Not mutagenic
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	In Vitro	Some positive data exist, but the data are not sufficient for classification
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	In Vitro	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	Not toxic to development	Rat	NOAEL 10 mg/kg	prematuring into lactation
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	Some positive female reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 10 mg/kg	prematuring into lactation
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 10 mg/kg	28 days
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 30 mg/kg/day	28 days
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 30 mg/kg	28 days
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	endocrine system   hematopoietic system   liver   immune system   muscles   respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 10 mg/kg	28 days
CYCLOHEXANAMINE, 4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.5 mg/kg	28 days
CYCLOHEXANAMINE,	Ingestion	vascular system	All data are negative	Rat	NOAEL 30	28 days



4,4'-METHYLENEBIS[N-(1-METHYLPROPYL)-					mg/kg	
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

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

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

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

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

**Chemical fate information**

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

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

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

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

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

**15.2. State Regulations**

Contact 3M for more information.

**15.3. Chemical Inventories**

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 Japan Chemical Substance 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.

<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:** 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.

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#### **Reason for Reissue**

Conversion to GHS format SDS.

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