

# **Safety Data Sheet**

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 Document Group:
 28-1121-4
 Version Number:
 3.02

 Issue Date:
 06/18/18
 Supercedes Date:
 01/18/18

## **SECTION 1: Identification**

### 1.1. Product identifier

3M(TM) Fire Barrier Mortar

### **Product Identification Numbers**

98-0400-5607-3, 98-0400-5608-1

### 1.2. Recommended use and restrictions on use

### Recommended use

Fire Protection

### 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Industrial Adhesives and Tapes Division **ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA **Telephone:** 1-888-3M HELPS (1-888-364-3577)

### 1.4. Emergency telephone number

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

## **SECTION 2: Hazard identification**

### 2.1. Hazard classification

Carcinogenicity: Category 1A.

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

## 2.2. Label elements

Signal word

Danger

### **Symbols**

Health Hazard |

### **Pictograms**

**Page 1 of** 10



### **Hazard Statements**

May cause cancer.

Causes damage to organs through prolonged or repeated exposure: respiratory system

### **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/vapors/spray.

Wear protective gloves.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

### **Response:**

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.

81% of the mixture consists of ingredients of unknown acute oral toxicity.

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

Ingredient	C.A.S. No.	% by Wt
Mineral Salt (NJTS Reg. No. 04499600-7191)	Trade Secret*	60 - 100 Trade Secret *
Silicate mineral (NJTS Reg. No. 04499600-7190)	Trade Secret*	1 - 10 Trade Secret *
Calcium Carbonate	471-34-1	< 7 Trade Secret *
Acid (NJTS Reg. No. 04499600-7184)	Trade Secret*	1 - 5 Trade Secret *
Silicate Mineral (NJTS Reg. No. 04499600-7183)	Trade Secret*	1 - 5 Trade Secret *
Quartz Silica	14808-60-7	< 2 Trade Secret *

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

## **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

Page 2 of

10

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

### 3M(TM) Fire Barrier Mortar

06/18/18

#### **Inhalation:**

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

#### **Skin Contact:**

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

#### **Eye Contact:**

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

### If Swallowed:

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

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

## **SECTION 5: Fire-fighting measures**

### 5.1. Suitable extinguishing media

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

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

None inherent in this product.

### **Hazardous Decomposition or By-Products**

Substance Carbon monoxide

Carbon monoxide Carbon dioxide

### **Condition**

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.

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

Collect as much of the spilled material as possible. Use wet sweeping compound or water to avoid dusting. Sweep up. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. 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**

**Page** 3 **of** 10

#### 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/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required. Solids can generate static electricity charges when transferred and in mixing operations sufficient to be an ignition source. Evaluate the need for precautions, such as grounding and bonding, low energy transfer of material (e.g. low speed, short distance), or inert atmospheres.

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

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	<b>Additional Comments</b>
Quartz Silica	14808-60-7	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Quartz Silica	14808-60-7	OSHA	TWA Table Z-	
			1(respirable):0.05	
			mg/m3;TWA Table Z-	
			3(respirable):0.1 mg/m3	
Limestone	471-34-1	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable	
			fraction):5 mg/m3	
Mineral Salt (NJTS Reg. No.	Trade	ACGIH	TWA(inhalable fraction):10	
04499600-7191)	Secret		mg/m3	
Mineral Salt (NJTS Reg. No.	Trade	OSHA	TWA(as total dust):15	
04499600-7191)	Secret		mg/m3;TWA(respirable	
,			fraction):5 mg/m <sup>3</sup>	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

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

#### 8.2.2. Personal protective equipment (PPE)

### Eye/face protection

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

Safety Glasses with side shields

### Skin/hand protection

**Page 4 of** 10

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

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

### Respiratory protection

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

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

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

## **SECTION 9: Physical and chemical properties**

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

**General Physical Form:**Solid **Specific Physical Form:**Powder

Odor, Color, Grade: Gray powder with slight cement odor

**Odor threshold** No Data Available

pH 10.2 - 11.9

Melting point >=1000 °C

**Boiling Point** Not Applicable **Flash Point** No flash point **Evaporation rate** Not Applicable Flammability (solid, gas) Not Classified Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable Vapor Pressure Not Applicable **Vapor Density** Not Applicable **Density** No Data Available

Specific Gravity 2.1 - 2.4 [Ref Std: WATER=1]

Solubility in Water Negligible [Details: Conditions: Solids may be dispersed in water]

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosityNot ApplicableMolecular weightNo Data Available

**Volatile Organic Compounds** 0 % weight

 $\begin{array}{ccc} \textbf{Percent volatile} & 0 \\ \textbf{VOC Less H2O \& Exempt Solvents} & 0 \text{ g/l} \end{array}$ 

## **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.

- F - 40

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

Strong acids

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:

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:**

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

#### **Eye Contact:**

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

### **Ingestion:**

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

### **Additional Health Effects:**

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

Silicosis: Signs/symptoms may include breathlessness, weakness, chest pain, persistent cough, increased amounts of sputum, and heart disease.

### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

**Page** 6 **of** 10

3M(TM) Fire Barrier Mortar	06/18/18
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<u>Ingredient</u>	CAS No.	Class Description	Regulation
SILICA, CRYS AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Quartz Silica	14808-60-7	Grp. 1: Carcinogenic to humans	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	Ingestion		No data available; calculated ATE >5,000 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Silicate Mineral (NJTS Reg. No. 04499600-7183)	Dermal		LD50 estimated to be > 5,000 mg/kg
Silicate Mineral (NJTS Reg. No. 04499600-7183)	Ingestion		LD50 estimated to be 2,000 - 5,000 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
Calcium Carbonate	Rabbit	No significant irritation
Silicate Mineral (NJTS Reg. No. 04499600-7183)	Professio	No significant irritation
	nal	
	judgeme	
	nt	
Quartz Silica	Professio	No significant irritation
	nal	
	judgeme	
	nt	

Serious Eye Damage/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Silicate Mineral (NJTS Reg. No. 04499600-7183)	Professio	No significant irritation
	nal	
	judgeme	
	nt	

### **Skin Sensitization**

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

### **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

Name	Route	Value
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

## Carcinogenicity

3M(TM) Fire Barrier Mortar	06/18/18

Name	Route	Species	Value
Quartz Silica	Inhalation	Human	Carcinogenic
		and	
		animal	

### Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Ingestion	Not classified for development	Rat	NOAEL 625 mg/kg/day	premating & during gestation

### Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Not classified	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. 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.

### **EPCRA 311/312 Hazard Classifications:**

Physical	Hazards
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Not applicable

### **Health Hazards**

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

### 15.2. State Regulations

Contact 3M for more information.

### California Proposition 65

Ingredient
SILICA, CRYSTALLINE (AIRBORNE
PARTICLES OF RESPIRABLE SIZE)

C.A.S. No.

Listing Carcinogen

#### 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 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 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 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 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.

**Page** 9 **of** 10

3M(TM) Fire Barrier Mortar

06/18/18

#### 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: 1 Flammability: 0 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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 28-1121-4
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