



## Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the New Zealand Hazardous Substances and New Organisms Act 1996 (HSNO Act) and as amended.

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ FireDam™ Spray 200-Gray

#### Product identification numbers

98-0400-5587-7

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

##### Recommended use

Fire retardant spray

#### 1.3. Supplier's details

**Address:** 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland

**Telephone:** (09) 477 4040

**E Mail:** innovation@nz.mmm.com

**Website:** 3m.co.nz

#### 1.4. Emergency telephone number

24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

Classified as hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

Not classified as a Dangerous Good according to; NZS 5433:2012 Transport of Dangerous Goods on Land, UN, IMDG and IATA.

#### HSNO classification

9.1D Aquatic toxicity

#### 2.2. Label elements

##### HAZARD STATEMENTS:

H401 Toxic to aquatic life.

## PRECAUTIONARY STATEMENTS

### Prevention:

P104 Read Safety Data Sheet before use.  
P273 Avoid release to the environment.

### Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

## SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
Polymer	Trade Secret	15 - 40
Water	7732-18-5	15 - 40
Limestone	1317-65-3	10 - 30
Aluminium hydroxide	21645-51-2	7 - 13
Styrene-butadiene polymer	9003-55-8	5 - 10

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

No need for first aid is anticipated.

#### 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

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.

#### Condition

During combustion.  
During combustion.

### 5.3. Special protective actions for fire-fighters

No unusual fire or explosion hazards 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 vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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 dykes 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 metal container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

Refer to Section 15 - HSN0 controls for more information

### 7.1. Precautions for safe handling

For industrial or professional use only. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

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

No special storage requirements.

### 7.3. Approved handler test certificate

Not required

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

### 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

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Wear 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.  
Indirect vented goggles.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

### Skin/hand protection

Skin protection is not required.

### 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.

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	Liquid.
<b>Appearance/Odour</b>	Viscious grey liquid with the consistency of paint.
<b>Odour threshold</b>	<i>No data available.</i>
<b>pH</b>	7
<b>Melting point/Freezing point</b>	<i>No data available.</i>
<b>Boiling point/Initial boiling point/Boiling range</b>	$\geq 100$ °C
<b>Flash point</b>	Flash point $> 93$ °C (200 °F)
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammable Limits(LEL)</b>	<i>No data available.</i>
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Vapour pressure</b>	186,158.4 Pa [ <i>@ 55 °C</i> ]
<b>Vapour density</b>	<i>No data available.</i>
<b>Relative density</b>	1.29 [ <i>Ref Std:WATER=1</i> ]
<b>Water solubility</b>	Complete
<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>Not applicable.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>Viscosity</b>	80 Pa-s
<b>Volatile organic compounds (VOC)</b>	<i>No data available.</i>

Percent volatile  
VOC less H<sub>2</sub>O & exempt solvents

No data available.  
< 1 g/l

## 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 polymerisation will not occur.

### 10.4 Conditions to avoid

None known.

### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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 labelling, 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

Vapours released during curing may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### Skin contact

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

#### Eye contact

Contact with the eyes during product use is not expected to result in significant irritation. Vapours released during curing may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### Ingestion

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

**Toxicological Data****Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		Data not available or insufficient for classification; calculated ATE >5,000 mg/kg
Polymer	Ingestion	Rat	LD50 > 2,000 mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation-Dust/Mist (4 hours)	Rat	LC50 3.0 mg/l
Limestone	Ingestion	Rat	LD50 6,450 mg/kg
Aluminium hydroxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium hydroxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Styrene-butadiene polymer	Dermal	Rabbit	LD50 > 2,000 mg/kg
Styrene-butadiene polymer	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Polymer	Rabbit	Minimal irritation
Limestone	Rabbit	No significant irritation
Aluminium hydroxide	Rabbit	No significant irritation
Styrene-butadiene polymer		No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
Polymer		Mild irritant
Limestone	Rabbit	No significant irritation
Aluminium hydroxide	Rabbit	No significant irritation
Styrene-butadiene polymer		Data not available or insufficient for classification

**Skin Sensitisation**

Name	Species	Value
Polymer		Data not available or insufficient for classification
Limestone		Data not available or insufficient for classification
Aluminium hydroxide	Guinea pig	Not sensitizing
Styrene-butadiene polymer		Data not available or insufficient for classification

**Respiratory Sensitisation**

Name	Species	Value
Polymer		Data not available or insufficient for classification
Limestone		Data not available or insufficient for classification
Aluminium hydroxide		Data not available or insufficient for classification
Styrene-butadiene polymer		Data not available or insufficient for classification

**Germ Cell Mutagenicity**

Name	Route	Value
Polymer		Data not available or insufficient for classification
Limestone		Data not available or insufficient for classification
Aluminium hydroxide		Data not available or insufficient for classification
Styrene-butadiene polymer		Data not available or insufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Polymer			Data not available or insufficient for classification
Limestone			Data not available or insufficient for classification
Aluminium hydroxide	Not specified.	Multiple animal species	Not carcinogenic

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Styrene-butadiene polymer		Data not available or insufficient for classification
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**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
Polymer		Data not available or insufficient for classification			
Limestone	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	prematuring & during gestation
Aluminium hydroxide	Ingestion	Not toxic to development	Rat	NOAEL 768 mg/kg/day	during organogenesis
Styrene-butadiene polymer		Data not available or insufficient for classification			

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Polymer			Data not available or insufficient for classification			
Limestone	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
Aluminium hydroxide			Data not available or insufficient for classification			
Styrene-butadiene polymer			Data not available or insufficient for classification			

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Polymer			Data not available or insufficient for classification			
Limestone	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Styrene-butadiene polymer			Data not available or insufficient for classification			

**Aspiration Hazard**

Name	Value
Polymer	Not an aspiration hazard
Limestone	Not an aspiration hazard
Aluminium hydroxide	Not an aspiration hazard
Styrene-butadiene polymer	Not an 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**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

**12.1. Toxicity**

**3M™ FireDam™ Spray 200-Gray****Ecotoxic to the aquatic environment.**

## 9.1D Aquatic toxicity

No product test data available.

Material	CAS Number	Organism	Type	Exposure	Test endpoint	Test result
Polymer	Trade Secret		Data not available or insufficient for classification			
Aluminium hydroxide	21645-51-2	Fish	Laboratory	96 hours	LC50	>100 mg/l
Aluminium hydroxide	21645-51-2	Water flea	Laboratory	48 hours	EC50	>100 mg/l
Aluminium hydroxide	21645-51-2	Green algae	Laboratory	72 hours	EC50	>100 mg/l
Limestone	1317-65-3	Rainbow trout	Experimental	21 days	NOEC	>100 mg/l
Limestone	1317-65-3	Western Mosquitofish	Experimental	96 hours	LC50	>100 mg/l
Styrene-butadiene polymer	9003-55-8		Data not available or insufficient for classification			

**12.2. Persistence and degradability**

No test data available.

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Aluminium hydroxide	21645-51-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Styrene-butadiene polymer	9003-55-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**12.3 : Bioaccumulative potential**

No test data available.

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Aluminium hydroxide	21645-51-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Polymer	Trade Secret	Data not available or	N/A	N/A	N/A	N/A



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		insufficient for classification				
Limestone	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Styrene-butadiene polymer	9003-55-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**12.4. Mobility in soil**

Please contact manufacturer for more details

**12.5 Other adverse effects**

No information available.

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

See Section 11.1 Information on toxicological effects

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

**SECTION 14: Transport Information**

NOT HAZARDOUS FOR TRANSPORT

**SECTION 15: Regulatory information**

HSNO Approval number      HSR002544  
Group standard name        Construction Products (Subsidiary Hazard) Group Standard 2006  
HSNO Hazard classification   Refer to section 2

**NZ Inventory of Chemicals (NZIoC) Status**

All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

**HSNO Controls**

Approved handler test certificate	Not required
Location and transit Depot certification test	Not required
Hazardous atmosphere zone	Not required
Fire extinguishers	Not required
Emergency response plan	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg

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Secondary containment	(for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance) 100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 6.1D, 6.5A, 6.5B, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for a HSNO 6.6A, 6.8A, 6.9A, 8.3A, 9.1D substance)
Tracking	Not required
Warning signage	100 L or 100 kg (for a HSNO 9.1A substance); or 1,000 L or 1,000 kg (for a HSNO 8.3A, 9.1B or 9.1C substance); or 10,000 L or 10,000 kg (for a HSNO 6.1D or 9.1D substance)

## SECTION 16: Other information

### Revision information:

No revision information is available.

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