



Safety Data Sheet

Copyright, 2019, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

This safety data sheet (SDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a SDS is not required for this product by the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013 because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

Document Group:	16-3772-7	Version Number:	2.00
Issue Date:	26/02/2019	Supersedes Date:	15/09/2014

This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

SECTION 1: Identification

1.1. Product identifier

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

Product Identification Numbers

98-0400-5421-9	98-0400-5422-7	98-0400-5423-5	98-0400-5472-2	98-0400-5473-0
98-0400-5474-8	DE-2729-4493-0	DE-2729-4494-8	DE-2729-4495-5	DE-2729-4496-3
DE-2729-4497-1	DE-2729-4498-9			

1.2. Recommended use and restrictions on use

Recommended use

Fire Protection

1.3. Supplier's details

ADDRESS: 3M Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301
Petaling, Jaya, Selangor

Telephone: 03-7884 2888

E Mail: 3mmyehsr@mmm.com

Website: www.3M.com.my

1.4. Emergency telephone number

+60 03-7884 2888

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Not classified as hazardous according to Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

2.2. Label elements

Signal word

Not applicable.

Symbols

Not applicable.

Pictograms

Not applicable.

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Expantral Flexible Intumescent Strips	Mixture	40 - 60
Fiber Mineral Wool	Mixture	35 - 55
Adhesive	Mixture	1 - 3
Plastic Film	9002-88-4	1 - 3
Hook & Loop Fastner	Mixture	0 - 3
Tape	Mixture	0 - 2

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

No need for first aid is anticipated.

Skin Contact:

No need for first aid is anticipated.

Eye Contact:

No need for first aid is anticipated.

If Swallowed:

No need for first aid is anticipated.

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. Non-combustible. Use a fire fighting agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

None inherent in this product.

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

Not applicable.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2. Conditions for safe storage including any incompatibilities

Not applicable.

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 SDS.

8.2. Exposure controls

8.2.1. Engineering controls

Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Eye protection not required.

Skin/hand protection

No protective gloves required.

Respiratory protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

SECTION 9: Physical and chemical properties

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance/Odor	Mineral fiber pillow with intumescent covering in a red plastic pillow.
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point/Freezing point	<i>Not Applicable</i>
Boiling point/Initial boiling point/Boiling range	<i>Not Applicable</i>
Flash Point	<i>No Data Available</i>
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Density	<i>Not Applicable</i>
Relative Density	<i>No Data Available</i>
Water solubility	Nil
Solubility- non-water	<i>Not Applicable</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>Not Applicable</i>
Viscosity	<i>No Data Available</i>
Molecular weight	<i>No Data Available</i>
Percent volatile	0 %
VOC Less H2O & Exempt Solvents	0 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 polymerization 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>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

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. No known health effects.

Skin Contact:

No health effects are expected. Contact with the skin during product use is not expected to result in significant irritation.

Eye Contact:

No health effects are expected. Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

No health effects are expected.

No known health effects.

Additional Information:

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

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
Expanrol Flexible Intumescent Strips	Dermal	Rabbit	LD50 > 4,640 mg/kg
Expanrol Flexible Intumescent Strips	Ingestion	Rat	LD50 500 mg/kg
Plastic Film	Dermal		LD50 estimated to be > 5,000 mg/kg
Plastic Film	Ingestion	Rat	LD50 > 2,000 mg/kg
Tape	Dermal		LD50 estimated to be > 5,000 mg/kg
Tape	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Expanrol Flexible Intumescent Strips	Rabbit	Corrosive
Plastic Film	Professional judgement	No significant irritation
Tape	Human	Mild irritant

Serious Eye Damage/Irritation

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

Name	Species	Value
Expanrol Flexible Intumescent Strips	Rabbit	Corrosive
Tape	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Expanrol Flexible Intumescent Strips	Mouse	Not classified
Tape	Human	Sensitizing

Respiratory Sensitization

Name	Species	Value
Tape	Human	Sensitizing

Germ Cell Mutagenicity

Name	Route	Value
Expanrol Flexible Intumescent Strips	In Vitro	Not mutagenic
Expanrol Flexible Intumescent Strips	In vivo	Not mutagenic
Tape	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Plastic Film	Not Specified	Multiple animal species	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
Expanrol Flexible Intumescent Strips	Ingestion	Not classified for development	Mouse	NOAEL 200 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Expanrol Flexible Intumescent Strips	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Expanrol Flexible Intumescent Strips	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 2,400 mg/kg/day	4 weeks
Expanrol Flexible Intumescent Strips	Ingestion	endocrine system blood	Not classified	Rat	NOAEL 804 mg/kg/day	3 months
Expanrol Flexible Intumescent Strips	Ingestion	heart liver	Not classified	Rat	NOAEL 1,259 mg/kg/day	8 weeks

Aspiration Hazard

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

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

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 labeling, 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

Acute aquatic hazard:

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Expanrol Flexible Intumescent Strips	Mixture	Green algae	Estimated	72 hours	Effect Concentration 50%	>345.4 mg/l
Expanrol Flexible Intumescent Strips	Mixture	Zebra Fish	Experimental	96 hours	Lethal Concentration 50%	210 mg/l
Expanrol Flexible Intumescent Strips	Mixture	Green algae	Estimated	72 hours	Effect Concentration 10%	34.5 mg/l
Plastic Film	9002-88-4		Data not available or insufficient for classification			
Tape	Mixture		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Expanrol Flexible Intumescent Strips	Mixture	Data not availbl- insufficient			N/A	
Plastic Film	9002-88-4	Data not availbl- insufficient			N/A	
Tape	Mixture	Data not			N/A	

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

		availbl- insufficient				
--	--	--------------------------	--	--	--	--

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Expantrol Flexible Intumescent Strips	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Plastic Film	9002-88-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Tape	Mixture	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

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Not hazardous for transportation.

Marine Transport (IMDG)

UN Number:None assigned.

Proper Shipping Name:None assigned.

Technical Name:None assigned.

Hazard Class/Division:None assigned.

Subsidiary Risk:None assigned.

Packing Group:None assigned.

Limited Quantity:None assigned.

Marine Pollutant: None assigned.

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Air Transport (IATA)

UN Number:None assigned.

3M(TM) Fire Barrier Pillows FB249, Small; FB269, Medium; FB369, Large; 3M(TM) Fire Barrier Self-Locking Pillows FB249SL, Small; FB269SL, Medium; FB369SL, Large

Proper Shipping Name:None assigned.
Technical Name:None assigned.
Hazard Class/Division:None assigned.
Subsidiary Risk:None assigned.
Packing Group:None assigned.
Limited Quantity:None assigned.
Marine Pollutant: None assigned.
Marine Pollutant Technical Name: None assigned.
Other Dangerous Goods Descriptions:
None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA.

SECTION 16: Other information

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M Malaysia SDSs are available at www.3M.com.my