

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M 08537 Brushable Seam Sealer

Product identification numbers

FS-9100-3115-2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Automotive.

1.3. Details of the supplier of the substance or mixture

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

E Mail: tox.uk@mmm.com Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive Indication of danger

Highly flammable; F; R11 Toxic for reproduction; Repr. Cat. 3; R63 Irritant; Xi; R36 Harmful; Xn; R48/20 R66 R67

For full text of R phrases, see Section 16.

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2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbol(s)





Highly

Flammable

Contains:

Toluene

Risk phrases

Highly flammable. R11 R36 Irritating to eyes.

Repeated exposure may cause skin dryness or cracking. R66

R67 Vapours may cause drowsiness and dizziness.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Possible risk of harm to the unborn child. R63

Safety phrases

Keep away from sources of ignition - No Smoking. S16

S23A Do not breathe vapour.

Wear suitable protective clothing and gloves. S36/37

EU VOC Directive (2004/42/EC) labelling:2004/42/EC IIB(e)(840)

470g/l

Notes on labelling

R65 is not required on the label due to the product's viscosity.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Limestone	1317-65-3	EINECS 215-	15 - 40	
		279-6		
Acrylonitrile - butadiene polymer	9003-18-3		10 < 30	
Butanone	78-93-3	EINECS 201-	10 - 30	F:R11; Xi:R36; R66; R67 (EU)
		159-0		
				Flam. Liq. 2, H225; Eye Irrit. 2,
				H319; STOT SE 3, H336;
				EUH066 (CLP)
Toluene	108-88-3	EINECS 203-	7 - 13	Repr.Cat.3:R63; F:R11;
		625-9		Xn:R48/20; Xn:R65; Xi:R38;
				R67 - Nota 4 (EU)
				Flam. Liq. 2, H225; Asp. Tox. 1,
				H304; Skin Irrit. 2, H315; Repr.
				2, H361d; STOT SE 3, H336;

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				STOT RE 1, H372 (CLP)
Formaldehyde, polymer with 4-(1,1-dimethylethyl) phenol	25085-50-1		5 - 10	
4-Methylpentan-2-one	108-10-1	EINECS 203- 550-1	5 - 10	F:R11; Xn:R20; Xi:R36-37; R66 (EU) Flam. Liq. 2, H225; Acute Tox.
				4, H332; Eye Irrit. 2, H319; STOT SE 3, H335; EUH066 (CLP)
2-Propenenitrile, telomer with 1,3-butadiene and tert-dodecanethiol	152286-38-9		1 - 5	
Poly(Vinyl Chloride)	9002-86-2		1 - 5	
Quartz	14808-60-7	EINECS 238- 878-4	< 1	Xn:R48/20 (Vendor) STOT RE 1, H372 (Self
				Classified)
2,6-Di-tert-butyl-p-cresol	128-37-0	EINECS 204- 881-4	< 1	STOT RE 2, H373; Aquatic Chronic 2, H411 (Self Classified)

Please see section 16 for the full text of any R phrases and H statements referred to in this section Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

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

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids and solids such as dry chemical or carbon dioxide to extinguish.

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5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance Carbon monoxide.

Carbon dioxide. Irritant vapours or gases. Condition

During combustion. During combustion. During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Eliminate all ignition sources if safe to do so. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR-AFFF type foam is recommended. 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 using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Do not use in a confined area or areas with little or no air movement. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Do not breathe dust/fume/gas/mist/vapours/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 release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids.

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Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient 4-Methylpentan-2-one	CAS Nbr 108-10-1	Agency Health and Safety Comm. (UK)	Limit type TWA:208 mg/m3(50 ppm);STEL:416 mg/m3(100 ppm)	Additional comments Skin Notation
Toluene	108-88-3	Health and Safety Comm. (UK)	TWA: 191 mg/m³ (50 ppm); STEL: 384 mg/m³ (100 ppm)	Skin Notation
2,6-Di-tert-butyl-p-cresol	128-37-0	Health and Safety Comm. (UK)	TWA:10 mg/m³	
Limestone	1317-65-3	Health and Safety Comm. (UK)	TWA(as inhalable dust):10 mg/m3;TWA(as respirable dust):4 mg/m3;TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m3	
Silica, crystalline (airborne particles of respirable size)	14808-60-7	Health and Safety Comm. (UK)	TWA(respirable):0.1 mg/m3	
Butanone	78-93-3	Health and Safety Comm. (UK)	TWA: 600 mg/m³ (200 ppm); STEL: 899 mg/m³ (300 ppm)	Skin Notation
Poly(Vinyl Chloride)	9002-86-2	Health and Safety Comm. (UK)	TWA(as inhalable dust):10 mg/m³;TWA(as respirable dust):4 mg/m³	

Health and Safety Comm. (UK): UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit ppm: parts per million mg/m³: milligrams per cubic metre

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/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Wear eye/face protection.

The following eye protection(s) are recommended: Indirect vented goggles.

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Skin/hand protection

Wear protective gloves.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material(s) are recommended: Polyvinyl alcohol (PVA). 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 vapours 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

Physical state Liquid.
Specific Physical Form: Paste

Appearance/Odour Ketone odour; Grey paste
Odour threshold No data available.
pH Not applicable.

Boiling point/boiling range >= 78.5 °C [Details:MEK]

Melting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point >= -4 °C [Details:MEK]
Autoignition temperature No data available.
Flammable Limits(LEL) No data available.
Flammable Limits(UEL) No data available.
Vapour pressure No data available.

Relative density 1.18 [Ref Std:WATER=1]

Water solubilityNo data available.Water solubilityNo data available.Solubility- non-waterNo data available.

Partition coefficient: n-octanol/waterNo data available.Evaporation rateNo data available.Vapour densityNo data available.

Decomposition temperatureNo data available.Viscosity800 - 2,000 Pa-sDensity1.18 g/cm3

9.2. Other information

Volatile organic compounds (VOC) 35 - 40 % weight Percent volatile 35 - 40 %

VOC less H2O & exempt solvents *No data available.*

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 polymerisation will not occur.

10.4 Conditions to avoid

Heat

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising 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 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

May be harmful if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause target organ effects after inhalation.

Skin contact

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause target organ effects after ingestion.

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Target Organ Effects:

Single exposure may cause:

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:

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value
Overall product	Inhalation-Vapor(4		Data not available or insufficient for
	hr)		classification; calculated ATE46.3 mg/l
Overall product	Ingestion		Data not available or insufficient for
			classification; calculated ATE >5,000
			mg/kg
Limestone	Dermal	Rat	LD50 > 2,000 mg/kg
Limestone	Inhalation-Dust/Mist	Rat	LC50 3.0 mg/l
	(4 hours)		
Limestone	Ingestion	Rat	LD50 6,450 mg/kg
Butanone	Dermal	Rabbit	LD50 > 8,050 mg/kg
Butanone	Inhalation-Vapor (4	Rat	LC50 34.5 mg/l
	hours)		
Butanone	Ingestion	Rat	LD50 2,737 mg/kg
Toluene	Dermal	Rat	LD50 12,000 mg/kg
Toluene	Inhalation-Vapor (4	Rat	LC50 30 mg/l
	hours)		
Toluene	Ingestion	Rat	LD50 2,600 mg/kg
Acrylonitrile - butadiene polymer	Dermal	Rabbit	LD50 > 15,000 mg/kg
Acrylonitrile - butadiene polymer	Ingestion	Rat	LD50 > 30,000 mg/kg
4-Methylpentan-2-one	Dermal	Rabbit	LD50 > 16,000 mg/kg
4-Methylpentan-2-one	Inhalation-Vapor (4	Rat	LC50 >8.2,<16.4 mg/l
	hours)		
4-Methylpentan-2-one	Ingestion	Rat	LD50 3,038 mg/kg
Formaldehyde, polymer with 4-(1,1-	Ingestion	Rat	LD50 5,660 mg/kg
dimethylethyl) phenol			
2-Propenenitrile, telomer with 1,3-			Data not available or insufficient for
butadiene and tert-dodecanethiol			classification
Poly(Vinyl Chloride)	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly(Vinyl Chloride)	Ingestion		LD50 estimated to be $> 5,000$ mg/kg
2,6-Di-tert-butyl-p-cresol	Dermal	Rat	LD50 > 2,000 mg/kg
2,6-Di-tert-butyl-p-cresol	Ingestion	Rat	LD50 > 2,930 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Limestone	Rabbit	No significant irritation
Butanone	Rabbit	Minimal irritation
Toluene	Rabbit	Irritant
Acrylonitrile - butadiene polymer		No significant irritation
4-Methylpentan-2-one	Rabbit	Mild irritant
Formaldehyde, polymer with 4-(1,1-dimethylethyl)		Data not available or insufficient for
phenol		classification
2-Propenenitrile, telomer with 1,3-butadiene and		Data not available or insufficient for
tert-dodecanethiol		classification
Poly(Vinyl Chloride)		No significant irritation
2,6-Di-tert-butyl-p-cresol	Human and animal	Minimal irritation
Quartz		No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Limestone	Rabbit	No significant irritation
Butanone	Rabbit	Severe irritant
Toluene	Rabbit	Moderate irritant
Acrylonitrile - butadiene polymer		No significant irritation
4-Methylpentan-2-one	Rabbit	Mild irritant
Formaldehyde, polymer with 4-(1,1-dimethylethyl)		Data not available or insufficient for
phenol		classification
2-Propenenitrile, telomer with 1,3-butadiene and		Data not available or insufficient for
tert-dodecanethiol		classification
Poly(Vinyl Chloride)		Data not available or insufficient for
		classification
2,6-Di-tert-butyl-p-cresol	Rabbit	Mild irritant
Quartz		Data not available or insufficient for
		classification

Skin Sensitisation

Name	Species	Value
Limestone		Data not available or insufficient for classification
Butanone		Data not available or insufficient for classification
Toluene	Guinea pig	Not sensitizing
Acrylonitrile - butadiene polymer		Data not available or insufficient for classification
4-Methylpentan-2-one	Guinea pig	Not sensitizing
Formaldehyde, polymer with 4-(1,1-dimethylethyl) phenol		Data not available or insufficient for classification
2-Propenenitrile, telomer with 1,3-butadiene and tert-dodecanethiol		Data not available or insufficient for classification
Poly(Vinyl Chloride)		Data not available or insufficient for classification
2,6-Di-tert-butyl-p-cresol	Human	Some positive data exist, but the data are not sufficient for classification
Quartz		Data not available or insufficient for classification

Respiratory Sensitisation

Name	Species	Value
Limestone		Data not available or insufficient for classification
Butanone		Data not available or insufficient for classification

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Toluene	Data not available or insufficient for classification
Acrylonitrile - butadiene polymer	Data not available or insufficient for classification
4-Methylpentan-2-one	Data not available or insufficient for classification
Formaldehyde, polymer with 4-(1,1-dimethylethyl) phenol	Data not available or insufficient for classification
2-Propenenitrile, telomer with 1,3-butadiene and tert-dodecanethiol	Data not available or insufficient for classification
Poly(Vinyl Chloride)	Data not available or insufficient for classification
2,6-Di-tert-butyl-p-cresol	Data not available or insufficient for classification
Quartz	Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Limestone		Data not available or insufficient for
		classification
Butanone	In Vitro	Not mutagenic
Toluene	In Vitro	Not mutagenic
Toluene	In vivo	Not mutagenic
Acrylonitrile - butadiene polymer		Data not available or insufficient for
		classification
4-Methylpentan-2-one	In Vitro	Not mutagenic
Formaldehyde, polymer with 4-(1,1-dimethylethyl)		Data not available or insufficient for
phenol		classification
2-Propenenitrile, telomer with 1,3-butadiene and		Data not available or insufficient for
tert-dodecanethiol		classification
Poly(Vinyl Chloride)	In Vitro	Not mutagenic
2,6-Di-tert-butyl-p-cresol	In Vitro	Not mutagenic
2,6-Di-tert-butyl-p-cresol	In vivo	Not mutagenic
Quartz	In Vitro	Some positive data exist, but the data are not
-		sufficient for classification
Quartz	In vivo	Some positive data exist, but the data are not
		sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Limestone			Data not available or insufficient for classification
Butanone	Inhalation	Human	Not carcinogenic
Toluene	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Toluene	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Toluene	Inhalation	Mouse	Some positive data exist, but the data are not sufficient for classification
Acrylonitrile - butadiene polymer			Data not available or insufficient for classification
4-Methylpentan-2-one	Inhalation	Multiple animal species	Carcinogenic.
Formaldehyde, polymer with 4-(1,1-dimethylethyl) phenol			Data not available or insufficient for classification
2-Propenenitrile, telomer with 1,3-butadiene and tert-dodecanethiol			Data not available or insufficient for classification
Poly(Vinyl Chloride)	Not specified.	Rat	Some positive data exist, but the data are not sufficient for classification

2,6-Di-tert-butyl-p-cresol	Ingestion	Multiple animal	Some positive data exist, but the data
		species	are not sufficient for classification
Quartz	Inhalation	Human and animal	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Limestone	Ingestion	Not toxic to	Rat	NOAEL 625	premating & during
		development		mg/kg/day	gestation
Butanone	Inhalation	Not toxic to female	Rat	NOAEL 14.7	90 days
		reproduction		mg/l	
Butanone	Inhalation	Not toxic to male	Rat	NOAEL 14.7	90 days
		reproduction		mg/l	
Butanone	Inhalation	Some positive	Rat	LOAEL 8.8	during gestation
		developmental data		mg/l	
		exist, but the data are			
		not sufficient for			
m 1	* 1 1	classification	**	270 (57 27	
Toluene	Inhalation	Some positive female	Human	NOAEL Not	occupational
		reproductive data		available	exposure
		exist, but the data are			
		not sufficient for			
m 1	* 1 1 2	classification		370 1 57 4 4	
Toluene	Inhalation	Some positive male	Rat	NOAEL 2.3	1 generation
		reproductive data		mg/l	
		exist, but the data are			
		not sufficient for			
T. 1	T	classification	D.	1 0 4 ET 500	1
Toluene	Ingestion	Toxic to development	Rat	LOAEL 520	during gestation
m 1	* 1 1 2	m	**	mg/kg/day	
Toluene	Inhalation	Toxic to development	Human	NOAEL Not	poisoning and/or
		5		available	abuse
Acrylonitrile -		Data not available or			
butadiene polymer		insufficient for			
43544	T 1 1 .:	classification	36101	NO LET 0.2	
4-Methylpentan-2-	Inhalation	Not toxic to female	Multiple animal	NOAEL 8.2	2 generation
one	Torrestino	reproduction	species	mg/l NOAEL	121
4-Methylpentan-2-	Ingestion	Some positive male	Rat		13 weeks
one		reproductive data		1,000 mg/kg/day	
		exist, but the data are not sufficient for		ilig/kg/uay	
		classification			
4-Methylpentan-2-	Inhalation	Some positive male	Multiple animal	NOAEL 8.2	2 generation
one	Illiaiation	reproductive data	species	mg/l	2 generation
one		exist, but the data are	species	IIIg/ I	
		not sufficient for			
		classification			
4-Methylpentan-2-	Inhalation	Some positive	Mouse	NOAEL 12.3	during organogenesis
one		developmental data		mg/l	
		exist, but the data are		8	
		not sufficient for			
		classification			
Formaldehyde,		Data not available or			
polymer with 4-(1,1-		insufficient for			
dimethylethyl)		classification			
phenol					
2-Propenenitrile,		Data not available or			
telomer with 1,3-		insufficient for			
	1	classification		1	1
butadiene and tert-		Classification			

Poly(Vinyl Chloride)	Not specified.	Not toxic to	Mouse	NOAEL Not	during gestation
		development		available	
2,6-Di-tert-butyl-p-	Ingestion	Not toxic to female	Rat	NOAEL 500	2 generation
cresol		reproduction		mg/kg/day	
2,6-Di-tert-butyl-p-	Ingestion	Not toxic to male	Rat	NOAEL 500	2 generation
cresol		reproduction		mg/kg/day	
2,6-Di-tert-butyl-p-	Ingestion	Some positive	Rat	NOAEL 100	2 generation
cresol		developmental data		mg/kg/day	
		exist, but the data are			
		not sufficient for			
		classification			
Quartz		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
Limestone	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
Butanone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classification	NOAEL Not available	
Butanone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Butanone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	not applicable
Butanone	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,080 mg/kg	not applicable
Toluene	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Toluene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 0.004 mg/l	3 hours
Toluene	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Acrylonitrile - butadiene polymer			Data not available or insufficient for classification			
4- Methylpentan	Inhalation	central nervous system	May cause drowsiness or	Human	LOAEL 0.10 mg/l	2 hours

-2-one		depression	dizziness			
4-	Inhalation	respiratory	May cause	Human	NOAEL 0.9	7 minutes
Methylpentan		irritation	respiratory		mg/l	
-2-one			irritation			
4-	Inhalation	vascular system	Some positive	Dog	NOAEL Not	not available
Methylpentan			data exist, but the		available	
-2-one			data are not			
			sufficient for			
			classification			
4-	Ingestion	central nervous	May cause	Rat	LOAEL 900	not applicable
Methylpentan		system	drowsiness or		mg/kg	
-2-one		depression	dizziness			
Formaldehyde			Data not available			
, polymer			or insufficient for classification			
with 4-(1,1- dimethylethyl			Classification			
) phenol						
2-			Data not available			
Propenenitrile			or insufficient for			
, telomer with			classification			
1,3-butadiene			Classification			
and tert-						
dodecanethiol						
Poly(Vinyl			Data not available			
Chloride)			or insufficient for			
,			classification			
Quartz			Data not available			
-			or insufficient for			
			classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Limestone	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Butanone	Dermal	nervous system	All data are negative	Guinea pig	NOAEL Not available	31 weeks
Butanone	Inhalation	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 14.7 mg/l	90 days
Butanone	Inhalation	heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system muscles	All data are negative	Rat	NOAEL 14.7 mg/l	90 days
Butanone	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	7 days
Butanone	Ingestion	nervous system	All data are negative	Rat	NOAEL 173 mg/kg/day	90 days
Toluene	Inhalation	auditory system	Causes damage to	Human	NOAEL Not	poisoning and/o

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		nervous system eyes olfactory system	organs through prolonged or repeated exposure		available	abuse
Toluene	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 2.3 mg/l	15 months
Toluene	Inhalation	heart liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 11.3 mg/l	15 weeks
Toluene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.1 mg/l	4 weeks
Toluene	Inhalation	immune system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL Not available	20 days
Toluene	Inhalation	bone, teeth, nails, and/or hair	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 1.1 mg/l	8 weeks
Toluene	Inhalation	hematopoietic system vascular system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Toluene	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 625 mg/kg/day	13 weeks
Toluene	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 2,500 mg/kg/day	13 weeks
Toluene	Ingestion	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 600 mg/kg/day	14 days
Toluene	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 105 mg/kg/day	28 days
Toluene	Ingestion	immune system	Some positive data exist, but the data are not	Mouse	NOAEL 105 mg/kg/day	4 weeks

			sufficient for			
			classification			
Acrylonitrile -			Data not available			
butadiene polymer			or insufficient for classification			
4-	Inhalation	liver	Some positive	Rat	NOAEL 0.41	13 weeks
Methylpentan	Illiaiation	livei	data exist, but the	Kat	mg/l	15 WCCKS
-2-one			data are not			
			sufficient for			
			classification			
4-	Inhalation	heart	Some positive	Multiple	NOAEL 0.8	2 weeks
Methylpentan			data exist, but the	animal species	mg/l	
-2-one			data are not sufficient for			
			classification			
4-	Inhalation	kidney and/or	Some positive	Multiple	NOAEL 0.4	90 days
Methylpentan		bladder	data exist, but the	animal species	mg/l	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
-2-one			data are not			
			sufficient for			
4	T 1 1 4	. ,	classification	3.6.10: 1	NOAFI 41	1.4 1
4- Methylpentan	Inhalation	respiratory	All data are negative	Multiple animal species	NOAEL 4.1 mg/l	14 weeks
-2-one		system	negative	animai species	IIIg/I	
4-	Inhalation	endocrine	All data are	Multiple	NOAEL 0.41	90 days
Methylpentan		system	negative	animal species	mg/l	
-2-one		hematopoietic		_		
		system				
4-	Inhalation	nervous system	All data are	Multiple	NOAEL 0.41	13 weeks
Methylpentan -2-one			negative	animal species	mg/l	
4-	Ingestion	endocrine	Some positive	Rat	NOAEL 1,000	13 weeks
Methylpentan	mgestion	system	data exist, but the	Rut	mg/kg/day	15 WCCKS
-2-one		hematopoietic	data are not			
		system liver	sufficient for			
		kidney and/or	classification			
4-	T	bladder heart immune	All data are	Rat	NOAFI 1040	120 1-
Methylpentan	Ingestion	system muscles	negative	Kat	NOAEL 1,040 mg/kg/day	120 days
-2-one		nervous system	negative		mg/kg/day	
2 0110		respiratory				
		system				
Formaldehyde			Data not available			
, polymer			or insufficient for			
with 4-(1,1-dimethylethyl			classification			
) phenol						
2-	1		Data not available		1	1
Propenenitrile			or insufficient for			
, telomer with			classification			
1,3-butadiene						
and tert-						
dodecanethiol Poly(Vinyl	Inhalation	respiratory	Some positive	Multiple	NOAEL .013	22 months
Chloride)	IlliaiatiOli	system	data exist, but the	animal species	mg/l	22 monuis
		5,500	data are not	annua species		
			sufficient for			
			classification			
2,6-Di-tert-	Ingestion	liver	May cause	Rat	NOAEL 25	28 days
butyl-p-cresol			damage to organs		mg/kg/day	
			though prolonged or repeated			
	I.		or repeated	<u> </u>		1

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			exposure			
2,6-Di-tert- butyl-p-cresol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 500 mg/kg/day	2 generation
2,6-Di-tert- butyl-p-cresol	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 420 mg/kg/day	40 days
2,6-Di-tert- butyl-p-cresol	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/kg/day	2 generation
2,6-Di-tert- butyl-p-cresol	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,480 mg/kg/day	10 weeks
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
Limestone	Not an aspiration hazard
Butanone	Not an aspiration hazard
Toluene	Aspiration hazard
Acrylonitrile - butadiene polymer	Not an aspiration hazard
4-Methylpentan-2-one	Some positive data exist, but the data are not sufficient
	for classification
Formaldehyde, polymer with 4-(1,1-dimethylethyl) phenol	Not an aspiration hazard
2-Propenenitrile, telomer with 1,3-butadiene and tert-dodecanethiol	Not an aspiration hazard
Poly(Vinyl Chloride)	Not an aspiration hazard
2,6-Di-tert-butyl-p-cresol	Not an aspiration hazard
Quartz	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

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Limestone	1317-65-3	Western	Experimental	96 hours	LC50	>100 mg/l
		Mosquitofish				

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Butanone	78-93-3	Ricefish	Experimental	96 hours	LC50	>100 mg/l
4-	108-10-1	Water flea	Experimental	48 hours	EC50	170 mg/l
Methylpentan-			F			3
2-one						
Toluene	108-88-3	Coho Salmon	Experimental	96 hours	LC50	5.5 mg/l
Toluene	108-88-3	Water flea	Experimental	48 hours	EC50	3.78 mg/l
Toluene	108-88-3	Green Algae	Experimental	72 hours	EC50	12.5 mg/l
4-	108-10-1	Green Algae	Experimental	96 hours	EC50	400 mg/l
Methylpentan-			1			
2-one						
2,6-Di-tert-	128-37-0	Green algae	Experimental	72 hours	NOEC	0.4 mg/l
butyl-p-cresol						
Limestone	1317-65-3	Rainbow trout	Experimental	21 days	NOEC	>100 mg/l
Butanone	78-93-3	Green algae	Experimental	72 hours	NOEC	93 mg/l
Butanone	78-93-3	Water flea	Experimental	21 days	NOEC	100 mg/l
4-	108-10-1	Water flea	Experimental	21 days	NOEC	7.8 mg/l
Methylpentan-						
2-one						
4-	108-10-1	Fathead	Experimental	32 days	NOEC	57 mg/l
Methylpentan-		minnow				
2-one						
Toluene	108-88-3	Sheepshead	Experimental	28 days	NOEC	3.2 mg/l
		Minnow				
2-	152286-38-9		Data not			
Propenenitrile,			available or			
telomer with			insufficient for			
1,3-butadiene			classification			
and tert- dodecanethiol						
	9003-18-3		Data not			
Acrylonitrile - butadiene	9003-18-3		available or			
polymer			insufficient for			
polymer			classification			
Poly(Vinyl	9002-86-2		Data not			
Chloride)	7002-00-2		available or			
Cinoriae)			insufficient for			
			classification			
Formaldehyde,	25085-50-1		Data not			
polymer with			available or			
4-(1,1-			insufficient for			
dimethylethyl)			classification			
phenol						
Quartz	14808-60-7		Data not			
-			available or			
			insufficient for			
			classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Butanone	78-93-3	Estimated		Photolytic half-	2.8 days (t 1/2)	Other methods
		Photolysis		life (in air)		
Toluene	108-88-3	Experimental		Photolytic half-	5.38 days (t	Other methods
		Photolysis		life (in air)	1/2)	

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4- Methylpentan- 2-one	108-10-1	Experimental Photolysis		Photolytic half- life (in air)	2.28 days (t 1/2)	Other methods
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Poly(Vinyl Chloride)	9002-86-2	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
Formaldehyde, polymer with 4-(1,1- dimethylethyl) phenol	25085-50-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Acrylonitrile - butadiene polymer	9003-18-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Propenenitrile, telomer with 1,3-butadiene and tert- dodecanethiol	152286-38-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Butanone	78-93-3	Experimental Biodegradation	20 days	BOD	89 % weight	Other methods
4- Methylpentan- 2-one	108-10-1	Experimental Biodegradation	14 days	BOD	84 % weight	OECD 301C - MITI test (I)
Toluene	108-88-3	Experimental Biodegradation	14 days	BOD	100 % weight	OECD 301C - MITI test (I)
2,6-Di-tert- butyl-p-cresol	128-37-0	Experimental Biodegradation	28 days	BOD	4.5 % weight	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Acrylonitrile -	9003-18-3	Data not	N/A	N/A	N/A	N/A
butadiene		available or				
polymer		insufficient for				
		classification				
Quartz	14808-60-7	Data not	N/A	N/A	N/A	N/A
		available or				
		insufficient for				
		classification				
2-	152286-38-9	Data not	N/A	N/A	N/A	N/A
Propenenitrile,		available or				
telomer with		insufficient for				
1,3-butadiene		classification				

and tert- dodecanethiol						
Poly(Vinyl Chloride)	9002-86-2	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
Formaldehyde, polymer with 4-(1,1- dimethylethyl) phenol	25085-50-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,6-Di-tert- butyl-p-cresol	128-37-0	Experimental BCF-Carp	56 days	Bioaccumulati on factor	1276	OECD 305E - Bioaccumulation flow- through fish test
Butanone	78-93-3	Experimental Bioconcentrati on		Log Kow	0.29	Other methods
4- Methylpentan- 2-one	108-10-1	Experimental Bioconcentrati on		Log Kow	1.31	Other methods
Toluene	108-88-3	Experimental Bioconcentrati on		Log Kow	2.73	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

Incinerate in a permitted waste incineration facility. 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.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

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08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

FS-9100-3115-2

ADR/RID: UN1139, COATING SOLUTION, LIMITED QUANTITY, 3., II, (E), ADR Classification Code: F1.

IMDG-CODE: UN1139, COATING SOLUTION, 3, II, LIMITED QUANTITY, EMS: FE,SE.

ICAO/IATA: UN1139, COATING SOLUTION, 3., II, LIMITED QUANTITY.

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
2,6-Di-tert-butyl-p-cresol	128-37-0	Gr. 3: Not classifiable	International Agency
			for Research on Cancer
4-Methylpentan-2-one	108-10-1	Grp. 2B: Possible human	International Agency
		carc.	for Research on Cancer
Poly(Vinyl Chloride)	9002-86-2	Gr. 3: Not classifiable	International Agency
			for Research on Cancer
Quartz	14808-60-7	Grp. 1: Carcinogenic to	International Agency
		humans	for Research on Cancer
Toluene	108-88-3	Gr. 3: Not classifiable	International Agency
			for Research on Cancer

Global inventory status

Contact 3M for more information.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

Repeated exposure may cause skin dryness or cracking.
Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of damaging the unborn child.
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

List of relevant R-phrases

R11 Highly flammable.

R20 Harmful by inhalation. R36 Irritating to eyes.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63 Possible risk of harm to the unborn child.
 R65 Harmful: May cause lung damage if swallowed.
 R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

Revision information:

Revision Changes:

Section 8: Eye/face protection information information was modified.

Section 15: Carcinogenicity information information was modified.

Section 16: List of relevant R phrase information information was modified.

Section 3: Composition/Information of ingredients table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 9: Property description for optional properties information was modified.

Section 8: Occupational exposure limit table information was modified.

Aspiration Hazard Table information was modified.

Section 11: Acute Toxicity table information was modified.

Carcinogenicity Table information was modified.

Serious Eye Damage/Irritation Table information was modified.

Germ Cell Mutagenicity Table information was modified.

Skin Sensitisation Table information was modified.

Respiratory Sensitisation Table information was modified.

Reproductive Toxicity Table information was modified.

Skin Corrosion/Irritation Table information was modified.

Target Organs - Repeated Table information was modified.

Target Organs - Single Table information was modified.

Section 11: Health Effects - Inhalation information information was modified.

Section 5: Fire - Extinguishing media information information was modified.

Section 6: Accidental release clean-up information information was modified.

Section 7: Precautions safe handling information information was modified.

Section 7: Conditions safe storage information was modified.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material, information was modified.

Section 8: Skin protection - protective clothing text information was added.

Section 9: Odour Threshold information was added.

Section 9: Solubility (non-water) information was added.

Section 09: Decomposition Temperature information was added.

Section 11: Single exposure may cause: heading information was added.

Section 11: Prolonged or repeated exposure may cause: heading information was added.

Section 11: Single exposure may cause standard phrases information was added.

Section 11: Prolonged or repeated exposure may cause standard phrases information was added.

Section 10: Hazardous decomposition products during combustion text information was added.

Section 12: Acute aquatic hazard information information was deleted.

Section 12: Chronic aquatic hazard heading information was deleted.

Section 12: Acute aquatic hazard heading information was deleted.

Section 12: Chronic aquatic hazard information information was deleted.

Section 11: Health Effects - Other information information was deleted.

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

3M	08537	Brush:	able	Seam	Sealer

(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 United Kingdom MSDSs are available at www.3M.com/uk

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