



Safety Data Sheet

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This product is defined as an article under REACH and does not require a Safety Data Sheet under Article 31 of Regulation (EC) No. 1907/2006 as amended for Great Britain. Since an SDS is not required, this document does not contain all of the information that is required for substance and mixture SDSs under REACH.

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

1.1. Product identifier

3M Glass Bubbles, Types K and S

Product Identification Numbers

FS-9100-0398-7	FS-9100-0410-0	FS-9100-0411-8	FS-9100-0882-0	FS-9100-1313-5
FS-9100-2330-8	FS-9100-2365-4	FS-9100-2395-1	FS-9100-2412-4	FS-9100-2451-2
FS-9100-2709-3	FS-9100-3325-7	FS-9100-3618-5	FS-9100-4216-7	FS-9100-4300-9
FS-9100-4324-9	FS-9100-4439-5	FS-9100-5053-3	FS-9100-5300-8	FS-9100-5304-0
FS-9100-5392-5				
7000033725	7000033726	7000079813	7000079830	7000079896
7000079917	7000033746	7000080221	7000079841	7000079888
7000080120	7000079898	7000043147	7000079972	7000080018
7000080135	7000080139	7000080160	7000080340	7000080337
7000080377				

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

Identified uses

Lightweight Filler

1.3. Details of the supplier of the safety data sheet

Address:	3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone:	+44 (0)1344 858 000
E Mail:	ner-productstewardship@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****The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain****CLASSIFICATION:**

This material is exempt from hazard classification according to Regulation (EC) No. 1272/2008, as amended for Great Britain, on classification, labelling, and packaging of substances and mixtures.

2.2. Label elements**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

Not applicable

100% of the mixture consists of components of unknown acute inhalation toxicity.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
OXIDE GLASS CHEMICALS (non-fibrous)	(CAS-No.) 65997-17-3 (EC-No.) 266-046-0	97 - 100	Substance with a national occupational exposure limit
Amorphous silica	(CAS-No.) 7631-86-9 (EC-No.) 231-545-4	<= 3	Substance with a national occupational exposure limit
sulphur dioxide	(CAS-No.) 7446-09-5 (EC-No.) 231-195-2	<= 1	Compressed gas, H280 Acute Tox. 3, H331 Skin Corr. 1B, H314 STOT SE 1, H370 Nota 5,U Eye Dam. 1, H318

Please see section 16 for the full text of any H statements referred to in this section

Although CASRN 65997-17-3 may be regulated as a member of Index Number 650-016-00-2 (Mineral wool, with the exception of those specified elsewhere in this Annex), the substance in this product that is described by this CASRN is not fibrous and is therefore not associated with a carcinogen classification.

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

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

No critical symptoms or effects. 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

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

5.3. Advice 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. Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS.

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.

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/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

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

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	CAS Nbr	Agency	Limit type	Additional comments
Dust, inhalable dust	65997-17-3	UK HSE	TWA(as respirable dust):4 mg/m ³ ;TWA(as inhalable dust):10 mg/m ³	
sulphur dioxide	7446-09-5	UK HSE	TWA:1.3 mg/m ³ (0.5 ppm);STEL:2.7 mg/m ³ (1 ppm)	
Dust, inhalable dust	7631-86-9	UK HSE	TWA(as respirable dust):4 mg/m ³ ;TWA(as inhalable dust):10 mg/m ³	
Silica, amorphous, inhalable dust	7631-86-9	UK HSE	TWA(as respirable dust):2.4 mg/m ³ ;TWA(as inhalable dust):6 mg/m ³	

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

No biological 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

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.

Applicable Norms/Standards

Use eye protection conforming to EN 166

Skin/hand protection

No chemical protective gloves are 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 particulates

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

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter type P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Low density fine powder (< 100 microns)
Colour	White
Odor	Odourless
Odour threshold	<i>Not applicable.</i>
Melting point/freezing point	<i>No data available.</i>
Boiling point/boiling range	<i>Not applicable.</i>
Flammability	Not applicable.
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Flash point	<i>Not applicable.</i>
Autoignition temperature	<i>Not applicable.</i>
Decomposition temperature	<i>Not applicable.</i>
pH	<i>substance/mixture is non-soluble (in water)</i>
Kinematic Viscosity	<i>Not applicable.</i>
Water solubility	Negligible
Solubility- non-water	<i>Not applicable.</i>
Partition coefficient: n-octanol/water	<i>Not applicable.</i>
Vapour pressure	<i>Not applicable.</i>
Density	0.1 - 0.6 g/cm ³
Relative density	0.1 - 0.6 [Ref Std: WATER=1]
Relative Vapour Density	<i>Not applicable.</i>
Particle Characteristics	<i>Not applicable.</i>

9.2. Other information**9.2.2 Other safety characteristics**

EU Volatile Organic Compounds
Evaporation rate

No data available.

Not applicable.

Molecular weight
Percent volatile
Softening point

No data available.
< 0.5 % weight
>=600 °C

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

Substance

Oxides of sulphur.

Condition

If Breakage Occurs

SECTION 11: Toxicological information

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

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.

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

May be harmful if swallowed.

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	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
OXIDE GLASS CHEMICALS (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
OXIDE GLASS CHEMICALS (non-fibrous)	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Amorphous silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Amorphous silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Amorphous silica	Ingestion	Rat	LD50 > 5,110 mg/kg
sulphur dioxide	Inhalation-Gas (4 hours)	Rat	LC50 1,000 ppm

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
OXIDE GLASS CHEMICALS (non-fibrous)	Professional judgement	No significant irritation
Amorphous silica	Rabbit	No significant irritation
sulphur dioxide	official classification	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
OXIDE GLASS CHEMICALS (non-fibrous)	Professional judgement	No significant irritation
Amorphous silica	Rabbit	No significant irritation
sulphur dioxide	Human and animal	Corrosive

Skin Sensitisation

Name	Species	Value
Amorphous silica	Human and animal	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Amorphous silica	In Vitro	Not mutagenic
sulphur dioxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
sulphur dioxide	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Amorphous silica	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
sulphur dioxide	Inhalation	Human and animal	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
Amorphous silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Amorphous silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Amorphous silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
sulphur dioxide	Inhalation	Not classified for female reproduction	Mouse	NOAEL 30 ppm	2 generation
sulphur dioxide	Inhalation	Not classified for male reproduction	Mouse	NOAEL 30 ppm	2 generation
sulphur dioxide	Inhalation	Not classified for development	Human	NOAEL Not available	environmental exposure

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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
sulphur dioxide	Inhalation	respiratory system	Causes damage to organs	Human	NOAEL 0.25 ppm	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Amorphous silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
sulphur dioxide	Inhalation	respiratory system	Not classified	Rat	LOAEL 10 ppm	21 weeks

Aspiration Hazard

For the component/components, either no data is currently available or the data is 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.

11.2. Information on other hazards

Not applicable.

SECTION 12: Ecological information

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
OXIDE GLASS CHEMICALS (non-fibrous)	65997-17-3	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Amorphous silica	7631-86-9	Green algae	Experimental	72 hours	ErC50	>173.1 mg/l
Amorphous silica	7631-86-9	Rainbow trout	Experimental	96 hours	LC50	>1,000 mg/l
Amorphous silica	7631-86-9	Sediment organism	Experimental	96 hours	EC50	8,500 mg/kg (Dry Weight)
Amorphous silica	7631-86-9	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
Amorphous silica	7631-86-9	Green algae	Experimental	72 hours	NOEC	173.1 mg/l
Amorphous silica	7631-86-9	Water flea	Experimental	21 days	NOEC	68 mg/l
Amorphous silica	7631-86-9	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Amorphous silica	7631-86-9	Redworm	Experimental	56 days	NOEC	100,000 mg/kg (Dry Weight)
sulphur dioxide	7446-09-5	Fathead minnow	Experimental	96 hours	LC50	26.2 mg/l
sulphur dioxide	7446-09-5	Water flea	Experimental	48 hours	EC50	1.94 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
OXIDE GLASS CHEMICALS (non-fibrous)	65997-17-3	Data not availbl- insufficient	N/A	N/A	N/A	N/A
Amorphous silica	7631-86-9	Data not availbl- insufficient	N/A	N/A	N/A	N/A
sulphur dioxide	7446-09-5	Estimated Photolysis		Photolytic half-life (in air)	6.4 hours (t 1/2)	

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
OXIDE GLASS CHEMICALS (non-fibrous)	65997-17-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Amorphous silica	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
sulphur dioxide	7446-09-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.4. Mobility in soil

No test data available.

12.5. Results of the PBT and vPvB assessment

Not applicable

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.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. 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.

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)

101112 Waste glass other than those mentioned in 10 11 11

SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.

IMDG Segregation Code	No data available.	No data available.	No data available.
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Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
Amorphous silica	7631-86-9	Gr. 3: Not classifiable	International Agency for Research on Cancer
sulphur dioxide	7446-09-5	Gr. 3: Not classifiable	International Agency for Research on Cancer

Global inventory status

Contact 3M for more information. 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 the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. 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 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 new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1
None

Seveso named dangerous substances, Annex 1, Part 2
None

Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

15.2. Chemical Safety Assessment

Not applicable.

SECTION 16: Other information

List of relevant H statements

H280	Contains gas under pressure; may explode if heated.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.

H370 Causes damage to organs.

Revision information:

GB Section 02: CLP Ingredient table information was deleted.

GB Section 15: Carcinogenicity information information was modified.

GB Section 15: Chemical Safety Assessment information was added.

Section 1: E-mail address information was modified.

Section 02: Label Elements: GB Percent Unknown information was added.

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

Section 03: Mixture not applicable information was deleted.

Section 03: Substance not applicable information was added.

Section 6: Accidental release personal information information was modified.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 9: Flammability (solid, gas) information information was deleted.

Section 09: Flammability information information was added.

Section 09: Particle Characteristics N/A information was added.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

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

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Skin Sensitization Table information was modified.

Section 11: Specific Target Organ Toxicity - single exposure text information was deleted.

Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was added.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12: Biocumulative potential information information was modified.

Section 13: Standard Phrase Category Waste GHS 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 added.

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. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M SDSs for Great Britain are available at www.3M.com/uk

For Northern Ireland documents, please contact your 3M representative to obtain a copy.