

SAFETY DATA SHEET: **BD15 MICROBALLOONS**

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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. 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 (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

MICROBALLOONS

Product Identification Numbers

98-0212-3053-1	FS-9100-0397-9	FS-9100-0398-7	FS-9100-0410-0	FS-9100-0411-8
FS-9100-0414-2	FS-9100-0441-5	FS-9100-0444-9	FS-9100-0746-7	FS-9100-0846-5
FS-9100-0882-0	FS-9100-1313-5	FS-9100-1831-6	FS-9100-2037-9	FS-9100-2330-8
FS-9100-2363-9	FS-9100-2544-4	FS-9100-2629-3	FS-9100-2708-5	FS-9100-2709-3
FS-9100-2711-9	FS-9100-3452-9	FS-9100-4216-7	FS-9100-4324-9	

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 substance or mixture

Address: Deluxe Materials Ltd. Unit 13, Cufaude Business Park, Cufaude Lane, Bramley, Hants RG26 5DL UK
Telephone: +44 (0)1256 883 944
E Mail: info@deluxematerials.com
Website: www.deluxematerials.com

1.4. Emergency telephone number
+44 (0)1256 883 944 (office hours only)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

This material is exempt from hazard classification according to Regulation (EC) No. 1272/2008, as amended, on

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classification, labelling, and packaging of substances and mixtures.

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

This product is considered an article and is exempt from hazard classification.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

Not applicable

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

Not applicable

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Glass, oxide, chemicals	65997-17-3	EINECS 266 - 046-0	97 - 100	
Silicon dioxide	7631-86-9	EINECS 231 - 545-4	0 - 3	

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

Although CASRN 65997 -17-3 may be regulated as a member of Index Number 650016-00-2 (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

See Section 11.1 Information on toxicological effects

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

Not applicable

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SECTION 5: Fire-fighting measures

5.1. 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

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

Ventilate the area with fresh air. Observe precautions from other sections.

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 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.

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
Glass, oxide, chemicals	65997-17-3	Manufacturer determined	TWA(as dust):10 mg/m ³	
Glass, oxide, chemicals	65997-17-3	UK HSC	TWA(as fiber):5 mg/m ³ (1 fibers/ml)	
Silicon dioxide	7631-86-9	UK HSC	TWA(as inhalable dust):6	

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mg/m³;TWA(as respirable dust):2.4 mg/m³

UK HSC : 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.

Skin/hand protection

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

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

Material	Thickness (mm)	Breakthrough Time
Neoprene.	No data available	No data available
Nitrile rubber.	No data available	No data available

Respiratory protection

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

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

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Low density fine powder (< 100 microns)
Appearance/Odour	White odourless
Odour threshold	Not applicable.
Boiling point/boiling range	Not applicable.
Melting point	No data available.
Flammability (solid, gas)	Not classified
Explosive properties	Not classified

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Oxidising properties	Not classified
Flash point	Not applicable.
Autoignition temperature	Not applicable.
Flamm able Limits(LEL)	Not applicable.
Flamm able Limits(UEL)	Not applicable.
Vapour pressure	Not applicable.
Relative density	0.1 - 0.6 [Ref Std:WATER=1]
Water solubility	Negligible
Solubility - non-water	Not applicable.
Partition coefficient: n -octanol/water	Not applicable.
Evaporation rate	Not applicable.
Vapour density	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Density	0.1 - 0.6 g/cm3

9.2. Other information

Volatile organic compounds (VOC)	Not applicable.
Percent volatile	< 0.5 % weight
Softening point	>=600 °C
VOC less H2O & exempt solvents	Not applicable.

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.	Not specified.

SECTION 11: Toxicological information

The information below may not agree with the EU 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 Toxicological effects

Signs and Symptoms of Exposure

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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.

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

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 ATE2,000 - 5,000 mg/kg
Glass, oxide, chemicals	Dermal		LD50 estimated to be > 5,000 mg/kg
Glass, oxide, chemicals	Ingestion		LD50 estimated to be 2,000- 5,000 mg/kg
Silicon dioxide	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silicon dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC 50 > 0.691 mg/l
Silicon dioxide	Ingestion	Rat	LD50 > 5,110 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Glass, oxide, chemicals	Professional judgement	No significant irritation
Silicon dioxide	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Glass, oxide, chemicals	Professional judgement	No significant irritation
Silicon dioxide	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Silicon dioxide	Human and animal	Not sensitizing

Respiratory Sensitisation

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

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Germ Cell Mutagenicity

Name	Route	Value
Glass, oxide, chemicals	In Vitro	Some positive data exist, but the data are not sufficient for classification
Silicon dioxide	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Glass, oxide, chemicals	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Silicon dioxide	Not specified.	Mouse	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
Silicon dioxide	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Glass, oxide, chemicals	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL not available	occupational exposure
Silicon dioxide	Inhalation	respiratory system silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

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.

SECTION 12: Ecological information

The information below may not agree with the EU 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 Deluxe Materials assessments.

12.1. Toxicity

No product test data available.

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Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Silicon dioxide	7631-86-9		Data not available or insufficient for classification			
Glass, oxide, chemicals	65997-17-3		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Silicon dioxide	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glass, oxide, chemicals	65997-17-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Silicon dioxide	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glass, oxide, chemicals	65997-17-3	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. 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

See Section 11.1 Information on toxicological effects

Dispose of waste product in a permitted industrial waste facility.

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.

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EU waste code (product as sold)

101112 Waste glass other than those mentioned in 10 11 11

SECTION 14: Transportation information

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FS -9100-0411-8, FS -9100-0414-2, FS -9100-0441-5, FS -9100-0444-9,
FS -9100-0746-7, FS -9100-0846-5, FS -9100-0882-0, FS -9100-1313-5,
FS -9100-1831-6, FS -9100-2037-9, FS -9100-2330-8, FS -9100-2363-9,
FS -9100-2544-4, FS -9100-2629-3, FS -9100-2708-5, FS -9100-2709-3,
FS -9100-2711-9, FS -9100-3452-9, FS -9100-4216-7, FS -9100-4324-9

Not hazardous for transportation

SECTION 15: Regulatory information

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

Carcinogenicity

Ingredient

Silicon dioxide

CAS Nbr

7631-86-9

Classification

Gr. 3: Not classifiable

Regulation

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 Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of 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.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

Revision information:

Revision Changes:

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: Bioaccumulative potential information information was modified.

Copyright information was modified.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

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Section 11: Serious Eye Damage/Irritation Table information was modified.
Section 11: Germ Cell Mutagenicity Table information was modified.
Section 11: Skin Sensitization Table information was modified.
Section 11: Reproductive Toxicity Table information was modified.
Section 11: Skin Corrosion/Irritation Table information was modified.
Section 11: Target Organs - Repeated Table information was modified.
Section 15: Carcinogenicity heading information was added.
Section 15: Carcinogenicity information information was added.
Section 15: Carcinogenicity table Regulation column heading information was added.
Section 15: Carcinogenicity table Ingredient column heading information was added.
Section 15: Carcinogenicity table CAS No column heading information was added.
Section 15: Carcinogenicity table Classification column heading information was added.
Section 8: Occupational exposure limit table information was added.
Section 11: Aspiration Hazard text information was added.
Section 11: Respiratory Sensitization text information was added.
Section 11: Skin Sensitization table- Name heading information was added.
Section 11: Skin Sensitization table- Species heading information was added.
Section 11: Skin Sensitization table- Value heading information was added.
Section 11: Serious Eye Damage/Irritation table - Name heading information was added.
Section 11: Serious Eye Damage/Irritation table- Species heading information was added.
Section 11: Serious Eye Damage/Irritation table- Value heading information was added.
Section 11: Skin Corrosion/Irritation table - Name heading information was added.
Section 11: Skin Corrosion/Irritation table- Species heading information was added.
Section 11: Skin Corrosion/Irritation table- Value heading information was added.
Section 11: Germ Cell Mutagenicity table - Name heading information was added.
Section 11: Germ Cell Mutagenicity table - Route heading information was added.
Section 11: Germ Cell Mutagenicity table - Value heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table Name heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table Route heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table Target Organ(s) heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table Value heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table Species heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table Test Result heading information was added.
Section 11: Specific Target Organ Toxicity - repeated exposure table Exposure Duration heading information was added.
Section 11: Specific Target Organ Toxicity - single exposure text information was added.
Section 11: Reproductive and/or Developmental Effects table Name heading information was added.
Section 11: Reproductive and/or Developmental Effects table- Route heading information was added.
Section 11: Reproductive and/or Developmental Effects table Value heading information was added.
Section 11: Reproductive and/or Developmental Effects table Species heading information was added.
Section 11: Reproductive and/or Developmental Effects table Test Result heading information was added.
Section 11: Reproductive and/or Developmental Effects text information was added.
Section 11: Carcinogenicity table- Name heading information was added.
Section 11: Carcinogenicity table- Route heading information was added.
Section 11: Carcinogenicity table- Species heading information was added.
Section 11: Carcinogenicity table- Value heading information was added.
Section 8: glove data- Material heading information was added.
Section 8: glove data- Thickness heading information was added.
Section 8: glove data- Breakthrough Time heading information was added.
Section 8: glove data value information was added.
Section 8: Skin protection- recommended gloves information information was deleted.
Prints No Data if Persistence and Degradability information is not present information was deleted.
Prints No Data if Bioaccumulative potential information is not present information was deleted.
Section 11: Exposure Duration table heading information was deleted.
Section 11: Test Result table heading information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our

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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.