



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™ Ceramic Microspheres W-210, W-410, W-610

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

Identified uses

3M™ Ceramic Microspheres

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

2.3. Other hazards

None known.

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

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB |
|----------------------|--|-----|--|
| Ceramic Microspheres | (CAS-No.) 66402-68-4 (EC-No.) 266-340-9 | 100 | Substance not classified as hazardous |

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

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

3.2. Mixtures

Not applicable

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

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

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 16321

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: | Fine powder (less than 10 microns). |
| Colour | White |
| Odor | Odourless |
| Odour threshold | <i>Not applicable.</i> |
| Melting point/freezing point | 1,000 °C |
| 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 | 9 - 11 [<i>Details: 1% aqueous solution</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 | 2.1 - 2.5 g/cm ³ |
| Relative density | 2.1 - 2.5 [<i>Ref Std: WATER=1</i>] |
| Relative Vapour Density | <i>Not applicable.</i> |
| Particle Characteristics | <i>Not applicable.</i> |

9.2. Other information

9.2.2 Other safety characteristics

| | |
|-------------------------------|----------------------------------|
| Bulk density | 60 - 80 3M™ Ceramic Microspheres |
| EU Volatile Organic Compounds | No data available. |
| Evaporation rate | Not applicable. |
| Molecular weight | No data available. |
| Percent volatile | 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. | At elevated temperatures. |

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.

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 ATE >2,000 - =5,000 mg/kg |
| Ceramic Microspheres | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Ceramic Microspheres | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|----------------------|---------|---------------------------|
| Ceramic Microspheres | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|----------------------|---------|---------------|
| Ceramic Microspheres | Rabbit | Mild irritant |

Skin Sensitisation

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

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 |
|----------------------|----------|--|
| Ceramic Microspheres | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|----------------------|------------|-------------------------|--|
| Ceramic Microspheres | Inhalation | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

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

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 |
|------|-------|-----------------|-------|---------|-------------|-------------------|
|------|-------|-----------------|-------|---------|-------------|-------------------|

3M™ Ceramic Microspheres W-210, W-410, W-610

| | | | | | | |
|----------------------|------------|--------------------|----------------|-------------------------|---------------------|-----------------------|
| Ceramic Microspheres | Inhalation | pulmonary fibrosis | Not classified | Multiple animal species | NOAEL not available | |
| Ceramic Microspheres | Inhalation | respiratory system | Not classified | 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.

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 | Identifier(s) | Organism | Type | Exposure | Test endpoint | Test result |
|----------------------|---------------|----------|---|----------|---------------|-------------|
| Ceramic Microspheres | 66402-68-4 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |

12.2. Persistence and degradability

| Material | Identifier(s) | Test type | Duration | Study Type | Test result | Protocol |
|----------------------|---------------|------------------------------------|----------|------------|-------------|----------|
| Ceramic Microspheres | 66402-68-4 | Data not available or insufficient | N/A | N/A | N/A | N/A |

12.3 : Bioaccumulative potential

| Material | Identifier(s) | Test type | Duration | Study Type | Test result | Protocol |
|----------------------|---------------|---|----------|------------|-------------|----------|
| Ceramic Microspheres | 66402-68-4 | 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.

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)

160304 Inorganic wastes other than those mentioned in 16 03 03

SECTION 14: Transportation information

Not hazardous for transportation.

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|---|--|--|--|
| 14.1 - UN Number or ID 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 Marine Transport in bulk according to IMO instruments | 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. |
|------------------------------|--------------------|--------------------|--------------------|

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

Global inventory status

Contact 3M for more information.

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

Revision information:

EU Section 14 - Table Data information was added.

EU Section 14 - Table Headers information was added.

GB Section 15: Chemical Safety Assessment information was added.

GBSDS Section 14 Transport in bulk - Main Heading information was deleted.

GBSDS Section 14 UN Number information was deleted.

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

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

Section 6: Accidental release personal information information was modified.

Section 9: Vapour pressure value information was added.

Section 9: Vapour pressure value information was deleted.

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: Serious Eye Damage/Irritation Table information was modified.

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

Section 11: Target Organs - Repeated 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.

Section 14 Classification Code – Main Heading information was deleted.

Section 14 Classification Code – Regulation Data information was deleted.

Section 14 Control Temperature – Main Heading information was deleted.

Section 14 Control Temperature – Regulation Data information was deleted.
Section 14 Emergency Temperature – Main Heading information was deleted.
Section 14 Emergency Temperature – Regulation Data information was deleted.
Section 14 Hazard Class + Sub Risk – Main Heading information was deleted.
Section 14 Hazard Class + Sub Risk – Regulation Data information was deleted.
Section 14 Other Dangerous Goods – Main Heading information was deleted.
Section 14 Other Dangerous Goods – Regulation Data information was deleted.
Section 14 Packing Group – Main Heading information was deleted.
Section 14 Packing Group – Regulation Data information was deleted.
Section 14 Proper Shipping Name information was deleted.
Section 14 Regulations – Main Headings information was deleted.
Section 14 Segregation – Regulation Data information was deleted.
Section 14 Segregation Code – Main Heading information was deleted.
Section 14 Special Precautions – Main Heading information was deleted.
Section 14 Special Precautions – Regulation Data information was deleted.
Section 14 Transport in bulk – Regulation Data information was deleted.
Section 14 UN Number Column data information was deleted.

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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.