

Safety Data Sheet according to Regulation (EC) No. 453/2010

1. Identification of the Substance/Mixture and the Company/Undertaking

| 1.1 | Product Identifier | FLOWSHIELD SL (NEW) FILLER C | Revision Date: | 27/05/2015 |
|-----|--------------------|------------------------------|------------------|------------|
| | Product Name: | Flowshield SL (new) Filler C | Supercedes Date: | New SDS |

1.2 Relevant identified uses of the substance or mixture and uses advised against
Coatings and paints, thinners, paint removers. Hand-mixing with intimate contact and only PPE available. Wide dispersive indoor use resulting in inclusion into or onto a matrix. For use by appropriately trained applicators. Roller application or brushing. Low energy spreading of coatings. Advised against: Any other use.

1.3 Details of the supplier of the safety data sheet

| | Supplier: | Flowcrete UK Ltd. The Flooring Technology Centre Booth Lane Moston, Sandbach, Cheshire. UK CW11 3QF |
|-----|-----------------------------|---|
| | | Tel: +44 (0)1270 753000 Fax: +44 (0)1270 753333 ehs.uk@flowcrete.com http://www.flowcrete.co.uk |
| | Datasheet Produced by: | ehs.uk@flowcrete.com |
| 1.4 | Emergency telephone number: | CHEMTREC +001 703 5273887 (Outside US) CHEMTREC 1-800-424-9300 (Inside US) |

2. Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

This product is not classified as hazardous in accordance with EC Regulation 1272/2008/EC.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

Hazardous Ingredients

| <u>CAS-No.</u> | EINEC No. No hazardous items exist | Name According to EEC | <u>%</u> | |
|-------------------------|--|-------------------------|---|------------------|
| <u>CAS-No.</u> | REACH Reg No. No hazardous items exist | CLP Symbols | CLP Hazard Statements | <u>M-Factors</u> |
| Additional Information: | | The text for CLP Hazard | d Statements shown above (if any) is given in Section 16. | |

4. First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice. Show this safety data sheet to the doctor in attendance.

AFTER INHALATION: Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off with soap and plenty of water.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Remove contact lenses.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Never give anything by mouth to an unconscious person. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.

Self protection of the first aider:

Be aware the other materials in use may be classified as hazardous.

4.2 Most important symptoms and effects, both acute and delayed

No Information

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture No Information

5.3 Advice for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Not combustible. No dangerous ingredients according to Regulation (EC) No. 1907/2006.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective equipment.

6.2 Environmental precautions

No conditions to be specially mentioned.

6.3 Methods and material for containment and cleaning up

Pick up and transfer to properly labelled containers. No special environmental precautions required. After cleaning, flush away traces with water. Refer to protective measures listed in sections 7 and 8.

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

Wear personal protective equipment. Avoid dust formation. Protect from moisture. Wash hands before breaks and at the end of workday. Do not breathe dust. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Avoid moisture. STORAGE CONDITIONS: Keep tightly closed in a dry and cool place.

7.3 Specific end use(s)

Component of a resin flooring product. The mixing and application to be in accordance with the technical data sheets.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(UK WELS)

| Name | CAS-No. | <u>LTEL ppm</u> | STEL ppm STEL mg/m3 | LTEL mg/m3 | OEL Note |
|--------------------------|---------|-----------------|---------------------|------------|----------|
| No hozardova itama aviat | | | | | |

No hazardous items exist

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified at the EU level under the dangerous substances and preparations regulation.

8.2 Exposure controls

Personal Protection RESPIRATORY PROTECTION: Effective dust mask. EYE PROTECTION: Eye wash bottle with pure water. Safety glasses with side-shields conforming to EN166. HAND PROTECTION: Protective gloves. Long sleeved clothing. OTHER PROTECTIVE EQUIPMENT: No Information ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas.

Chemical Name:

EC No.: CAS-No.:

DNELs - Derived no effect level

| | Workers | | Consumers | | | | | |
|------------|--------------|---------------|---------------|-----------------|--------------|---------------|---------------|-----------------|
| Route of | Acute effect | Acute effects | Chronic | Chronic effects | Acute effect | Acute effects | Chronic | Chronic effects |
| Exposure | local | systemic | effects local | systemic | local | systemic | effects local | systemic |
| Oral | | Not | required | | | | | |
| Inhalation | | | | | | | | |
| Dermal | | | | | | | | |

PNEC's - Predicted no effect concentration

| Environmental protection target | PNEC |
|------------------------------------|------|
| Fresh water | |
| Fresh water sediments | |
| Marine water | |
| Marine sediments | |
| Food chain | |
| Microorganisms in sewage treatment | |
| soil (agricultural) | |
| Air | |

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| Appearance: | Granules/Powder Mix |
|--|---------------------|
| Physical State | Solid |
| Odor | odorless |
| Odor threshold | Not determined |
| рН | Not determined |
| Melting point / freezing point (°C) | Not determined |
| Boiling point/range (°C) | 0 - N.D. |
| Flash Point, (°C) | 999 |
| Evaporation rate | Not determined |
| Flammability (solid, gas) | Not determined |
| Upper/lower flammability or explosive limits | 999999 |
| Vapour Pressure | Not determined |
| Vapour density | Not determined |
| Relative density | ca. 2.65 |
| Solubility in / Miscibility with water | insoluble |
| Partition coefficient: n-octanol/water | Not determined |
| Auto-ignition temperature (°C) | Not determined |
| Decomposition temperature (°C) | Not determined |
| Viscosity | Not determined |
| Explosive properties | Not Applicable |
| Oxidising properties | Not determined |
| Other information | |

9.2 Other information VOC Content g/l:

<140

This is a calculated maximum VOC content for the mixed ready to use product (to Directive 2004/42/EC).

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

- **10.2 Chemical stability** Stable under normal conditions.
- 10.3 Possibility of hazardous reactions Hazardous polymerisation does not occur.
- **10.4 Conditions to avoid** Avoid moisture.
- **10.5** Incompatible materials Do not store near acids.
- 10.6 Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity: Oral LD50:

No Information

| Inhalation LC50: | No Information |
|----------------------------|---------------------------|
| Irritation: | No information available. |
| Corrosivity: | No information available. |
| Sensitization: | No information available. |
| Repeated dose toxicity: | No information available. |
| Carcinogenicity: | No information available. |
| Mutagenicity: | No information available. |
| Toxicity for reproduction: | No information available. |
| STOT-single exposure: | No information available. |
| STOT-repeated exposure: | No information available. |
| Aspiration hazard: | No information available. |

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

Additional Information:

Social Dialogue on Respirable Crystalline Silica and Good Practices Guide

A multi-sectoral social dialogue agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the Good Practices Guide, are available from http://www.nepsi.eu and provide useful information and guidance for the handling of products containing respirable crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

Literature References

Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003).

So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required.

'Health & Safety Executive (specific for UK):

Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE (Health and Safety Executive, UK) in the Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003). The HSE points out on its website that "Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as "silicosis". In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis. This product may contain Quartz (silicon dioxide), which is listed by IARC as a known carcinogen to humans (Group 1). This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

12. Ecological Information

| 12.1 | Toxicity: | |
|------|--|--|
| | EC50 48hr (Daphnia): | No information |
| | IC50 72hr (Algae): | No information |
| | LC50 96hr (fish): | No information |
| 12.2 | Persistence and degradability: | No information |
| 12.3 | Bioaccumulative potential: | No information |
| 12.4 | Mobility in soil: | No information |
| 12.5 | Results of PBT and vPvB assessment: | The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII. |

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code:080199Packaging Waste Code:150101

14. Transport Information

| 14.1 | UN number | No Information |
|------|--|------------------------------|
| 14.2 | UN proper shipping name | NOT DANGEROUS GOODS (Filler) |
| | Technical name | No Information |
| 14.3 | Transport hazard class(es) | No Information |
| | Subsidiary shipping hazard | No Information |
| 14.4 | Packing group | No Information |
| 14.5 | Environmental hazards | No Information |
| 14.6 | Special precautions for user | Not applicable |
| | EmS-No.: | No Information |
| 14.7 | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | Not applicable |

15. Regulatory Information

^{15.1} Safety, health and environmental regulations/legislation for the substance or mixture:

| National Regulations: | | |
|--------------------------------------|----------------|--|
| Denmark Product Registration Number: | No Information | |
| Danish MAL Code: | No Information | |
| Sweden Product Registration Number: | No Information | |
| Norway Product Registration Number: | No Information | |
| WGK Class: | 1 | |

Chemical Safety Assessment:

15.2 No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

This product is not classified as hazardous in accordance with EC Regulation 1272/2008/EC.

Reasons for revision

This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark ESIS (The European Chemical Substances Information System), provided by the European Commission Joint Research Centre in Ispra, Italy Annex VI of the EU Council Directive 67/548/EEC Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

Acronym & Abbreviation Key:

Date Printed: 28/01/2016

| CLP | Classification, Labeling & Packaging Regulation |
|--------|--|
| EC | European Commission |
| EU | European Union |
| US | United States |
| CAS | Chemical Abstract Service |
| EINECS | European Inventory of Existing Chemical Substances |
| REACH | Registration, Evaluation, Authorization of Chemicals Regulation |
| GHS | Globally Harmonized System of Classification and Labeling of Chemicals |
| LTEL | Long term exposure limit |
| STEL | Short term exposure limit |
| OEL | Occupational exposure limit |
| ppm | Parts per million |
| mg/m3 | Milligrams per cubic meter |
| TLV | Threshold Limit Value |
| ACGIH | American Conference of Governmental Industrial Hygienists |
| OSHA | Occupational Safety & Health Administration |
| PEL | Permissible Exposure Limits |
| VOC | Volatile organic compounds |
| g/l | Grams per liter |
| mg/kg | Milligrams per kilogram |
| N/A | Not applicable |
| LD50 | Lethal dose at 50% |
| LC50 | Lethal concentration at 50% |
| EC50 | Half maximal effective concentration |
| IC50 | Half maximal inhibitory concentration |
| PBT | Persistent bioaccumulative toxic chemical |
| vPvB | Very persistent and very bioaccumulative |
| EEC | European Economic Community |
| ADR | International Transport of Dangerous Goods by Road |
| RID | International Transport of Dangerous Goods by Rail |
| UN | United Nations |
| IMDG | International Maritime Dangerous Goods Code |
| IATA | International Air Transport Association |
| MARPOL | International Convention for the Prevention of Pollution From Ships, 1973 as |
| | modified by the Protocol of 1978 |
| IBC | International Bulk Container |

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.