Contents

1. Scope of Works / Description of Systems of Plant & Equipment

Panattoni Poyle, Horton Road, Poyle, SL3 0BB.

1.0 Scope of works

CERAMIC WALL AND FLOOR TILING

Panattoni Poyle, Horton Road, Poyle, SL3 0BB.

DISCIPLINE: CERAMIC TILING

COMPANY NAME: Specialist Tiling Contractors Limited

ADDRESS: Unit 6 Monksbridge Trading Estate,
Outgang Lane,
Dinnington,
S25 3QZ.

TELEPHONE No: 01909 566770

E-MAIL ADDRESS: Ross@stctiling.co.uk

CONTACT NAME: Ross Naylor

FOR

PROJECT NAME: **Panattoni - Poyle**

PROJECT ADDRESS: **Panattoni – Poyle,**
Horton Road,
Poyle,
SL3 0BB

2. Suppliers and Manufacturers Directory

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2.0 Materials, products and components used on the project

Material Component	Product No/ref	Name of supplier	Locations used/drawing no
	IMP05P 300x600	Johnson Tiles	Reception Feature Wall Tile
	MIN02N 300x600	Johnson Tiles	WC Main Wall Tile
	MIN05N 300x600	Johnson Tiles	WC Feature Wall Tile
	MIN05G 600x600	Johnson Tiles	WC Floor Tile, Shower Floor Tile & Outer Reception Floor Tile
	KER558 200x200	Johnson Tiles	Kitchenette Floor Tile
	MIN03G 600x600	Johnson Tiles	Inner Reception Floor Tile
	MoreFlex White Adhesive	Kelmore Ltd	Wall tiling
	MoreFlex Grey Adhesive	Kelmore Ltd	Floor Tiling
	Flex15 Caramel Grout	Kelmore Ltd	Grout for Inner Reception Floor
	Flex15 Alpine White Grout	Kelmore Ltd	Grout for Teapoint Walls
	Flex15 Black Grout	Kelmore Ltd	Grout for Reception Wall
	Flex15 Slate Grey Grout	Kelmore Ltd	Grout for Cleaners, Store & Teapoint Floors
	Flex15 Limestone Grout	Kelmore Ltd	Grout for Main WC Wall Tiles
	Flex15 Charcoal Grout	Kelmore Ltd	Grout for Feature WC Wall Tiles, Outer Reception Floor Tile & All WC Floor Tiles

3.0 Directory of manufacturers, suppliers and sub-contractors used on the project

Name	Address	Telephone and Fax No.	Works carried out / products supplied
Kelmore Ltd	The Dell Berry Way Chorley PR7 6RA	Tel: 01257 830511	
Johnson Tiles Ltd	Harewood Street Tunstall Stoke on Trent ST6 5JZ	Tel: 01782 575575	
		Tel: Fax:	
		Tel: Fax:	
		Tel: Fax:	

3. Manufacturers Information

Safety Data Sheet
Grout Flex15

according to Regulation (EC) No.1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758 and UK SI 2020/1567

Date of issue: 21/04/2023 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Trade name : Grout Flex15

Type of product : Powder

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

1.2.1. Relevant identified uses

Main use category : Consumer use, Professional use, Industrial use

1.2.2. Uses advised against

None identified

1.3. Details of the supplier of the safety data sheet

Manufacturer

Kelmore Ltd
The Dell
Berry Way
Chorley
PR7 6RA

e-mail address of person responsible for this SDS: info@kelmore.co.uk

1.4. Emergency telephone number

Telephone number : +44 (0) 1257 830511 *Office hours only

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to UK CLP/GHS

Serious eye irritation – Category 2 H319

Full text of H statements : see section 16
See section 11 for more detailed information on helth effects and symptoms.

2.2. Label elements

Hazard Pictograms :

Signal Word : Warning

Hazard Statements : H319 – Causes serious eye irritation.

Precautionary statements : P261 – Avoid breathing dust.
: P264 – Wash contaminated skin thoroughly after handling.
: P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
: P501 - Dispose of contents and container in accordance with national regulations.

Hazardous ingredients : Portland Cement

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Type
Cement, portland	(CAS-No.) 65997-15-1 (EC-No.) 266-043-4	< 2	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1] [2]
Calcium Hydroxide	(CAS-No.) 1305-62-0 (EC-No.) 215-137-3	< 2	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1] [2]
Calcium carbonate	(CAS-No.) 1317-65-3 (EC-No.) 215-279-6	1 - 5	Not classified	[2]

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : If skin irritation occurs: Get medical advice/attention. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.

First-aid measures after eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes.Chemical burns must be treated promptly by a physician.

First-aid measures after ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain, watering, redness

Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing

Skin Contact : Adverse symptoms may include the following: pain, irritation, redness, blistering

Ingestion : Adverse symptoms may include the following: stomach pains

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled

Specific treatments : No specific treatment

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use dry chemical powder

Unsuitable extinguishing media : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

5.2. Special hazards arising from the substance or mixture

Hazards from the substance or mixture : May form explosible dust-air mixture if dispersed.

Hazardous combustion products : Toxic fumes may be released.

5.3. Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Emergency procedures : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Protective equipment : Put on appropriate personal protective equipment

6.1.2. For emergency responders

Emergency procedures : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Clean up immediately by sweeping or vacuum. Avoid dust generation.

Other information : Dispose of materials or solid residues at an authorized site or via a licensed waste disposal contractor.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Wear personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Heat sources.

Incompatible materials : Sources of ignition.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

Product/ingredient name	Exposure limit values
Cement, portland, chemicals (65997-15-1)	**EH40/2005 WELs (Fourth edition, 2020) United Kingdom (UK)** TWA: 10 mg/m³ 8 hours. Form: inhalable dust TWA: 4 mg/m³ 8 hours. Form: respirable dust
Calcium Carbonate (1317-65-3)	**EH40/2005 WELs (Fourth edition, 2020) United Kingdom (UK)** TWA: 10 mg/m³ 8 hours. Form: inhalable dust TWA: 4 mg/m³ 8 hours. Form: respirable dust
Calcium Hydroxide (1305-62-0)	**EH40/2005 WELs (Fourth edition, 2020) United Kingdom (UK)** TWA: 5 mg/m³ 8 hours. Form: inhalable dust TWA: 1 mg/m³ 8 hours. Form: respirable dust TWA: 4 mg/m³ 15 minutes. Form: respirable dust

8.1.2 Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards.

8.1.3 Air contaminants formed
No additional information available

8.1.4 DNEL AND PNEC
No additional information available

8.2. Exposure controls
Appropriate engineering controls:

Use only with adequate ventilation. Do not breathe dust. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment:

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: disposable particulate mask(P2)(EN143)

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : Various
Odour : Odourless
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : Not relevant
Freezing point : Not relevant
Boiling point : Not relevant
Flash point : Not relevant
Auto-ignition temperature : No data available

Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.2 g/cm³
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Stable under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7). Prevent dust accumulation.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Based on available data, the classification criteria are not met.
Acute toxicity (dermal)	: Based on available data, the classification criteria are not met.
Acute toxicity (inhalation)	: Based on available data, the classification criteria are not met.
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Endocrine disrupting properties	: Based on available data, the classification criteria are not met.
Other information	: Not available

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	: Not classified. (Based on available data, the classification criteria are not met)
Chronic aquatic toxicity	: Not classified. (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties
No known significant effects or critical hazards.

12.6. Other adverse effects
No known significant effects or critical hazards.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user
Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
UK (GB)/REACH

Contains no REACH substances Annex XIV - List of substances subject to authorization

Contains no REACH substances with Annex XVII restrictions

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation

Abbreviations and acronyms:

ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
vPvB = Very Persistent and Very Bioaccumulative

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, the above named supplier does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

TECHNICAL DATA SHEET

Grout Flex15

01/06/24

Kelmore's Grout Flex15 is a highly flexible, polymer modified, fast setting, cementitious grout for walls and floors. Available in a comprehensive range of popular colours, all complemented with a matching silicone, it is suitable for use in joints up to 15mm wide and offers built in mould resistance. This efflorescence free grout has been formulated to facilitate the wash off, enabling the grout to be left to firm up in the joints without concern of it being difficult to remove from the tile face, resulting in a functional, aesthetically pleasing full grout joint. Grout Flex15 is suitable for interior and exterior use, in wet areas, including power showers, and in both domestic and commercial environments. Grout Flex15 has been manufactured to the highest of standards using unique technologies, extensive knowledge and outstanding raw materials. When compared to the production of traditional cementitious grouts, this results in a significant reduction in CO_2 emissions.

MOULD RESISTANT

Grout Flex15

Classification (EN 13888)		CG2 WA
Pack Size		3kg
Number of Colours		17
Powder to water ratio (by volume)		Approximately 3¼:1 (3¼ parts powder to 1 part water)
Water required per 3kg bag		Approximately 800ml to 850ml
Application Temperature (air and background)		≥ 5˚C
Joint Width		1mm to 15mm
@20˚C	Pot Life	40 minutes
	Light Foot Traffic	3 hours
	Final Set	24 hours

Colours available:

Alpine White, Antique White, Jasmine, Oat, Pebble, Stone, Greige, Caramel, Mocha

Limestone, Light Grey, Silver Grey, Natural Grey, Slate Grey, Dark Grey, Charcoal, Black

Kelmore

Kelmore Ltd, The Dell, Berry Way, Chorley, PR7 6RA
Tel: **01257 830511** Email: **technical@kelmore.co.uk**

Kelmore

Grout Flex15

Areas of Use					
Walls	Interior	Wet Areas	Domestic	Water Piped Underfloor Heating	Limited Movement/Vibration
Floors	Exterior	Dry Areas	Commercial	Electric Underfloor Heating	

Suitable Tiles					
Porcelain	Ceramic	Natural Stone	Glass	Terrazzo	Agglomerate

Coverage

The coverage will vary dependent on the size and thickness of the tile and the joint width. The following table provides an approximate coverage per 3kg bag of Grout Flex15 when used with a selection of different sized tiles:

Tile Size	2mm Joint Width	3mm Joint Width	4mm Joint Width	5mm Joint Width
15x15x8mm	0.97m^2	0.65m^2	0.48m^2	0.39m^2
200x100x7mm	9.8m^2	6.5m^2	4.9m^2	3.9m^2
600x300x8mm	25m^2	17m^2	12.9m^2	10.3m^2
600x600x10mm	31m^2	20m^2	15m^2	12m^2
800x800x10mm	41m^2	27m^2	20m^2	16m^2
1200x1200x10mm	62m^2	41m^2	31m^2	24m^2
2400x1200x6mm	137m^2	91m^2	68m^2	55m^2

Mixing

Mix by volume approximately 3¼ parts powder to 1 part clean, cold water (a full 3kg bag of Grout Flex15 will require approximately 800ml to 850ml water). Pour the water into a clean bucket before gradually adding the powder. Mix thoroughly until a smooth, creamy, slump-free consistency is achieved. Allow the mixed grout to stand for 2 minutes then re-mix briefly before use. If mixing the grout using a mechanical paddle mixer, mix at low speeds so not to entrain air in the product.

Application

Apply the mixed grout to the wall or floor using a grout float or squeegee. Work the grout into the joints until they are completely filled ensuring any surplus grout is removed from the tile face as work proceeds. When the grout has started to stiffen* in the joints, residues can be removed using a damp sponge. Ensure the sponge is damp, not wet, and that it is frequently rinsed out in clean water. When the grout has sufficiently hardened, any remaining grout haze can be removed using a dry, clean cloth.

*@20˚C, the grout in ceramic tiles will start to stiffen after approximately 20 minutes and in porcelain tiles after approximately 45 minutes.

Set times and in service use

At 20°C, Grout Flex15 will accept light foot traffic after 3 hours. It will reach its final set after 24 hours, and in dry areas normal service can commence. Showers must be left a minimum of 3 days after grouting before use. Whilst still allowing the product to air cure, external tiling must be protected from frost and rainfall for 48 hours. After completing installations on backgrounds incorporating underfloor heating, the heating system should not be run for 10 days. Following this period, the floor temperature must be gradually raised to its optimal operating temperature.

Kelmore

Grout Flex15

SPECIFIC PRODUCT INFORMATION

- Only mix Grout Flex15 with the amount of water stated. Adding too much or too little water can result in the grout's performance and appearance being compromised.
- When grouting areas that require multiple mixes of Grout Flex15, ensure consistent water ratios are maintained throughout.
- To avoid any potential staining, susceptible tiles must be adequately sealed prior to using Grout Flex15.
- Some soft or porous tiles may be susceptible to scratching or surface discolouration when grouting. Prior to grouting the tiled area, a trial application should be carried out to ensure suitability.

NOTES: All cementitious grouts should only be used when the temperature (air and background) is 5°C or above. If temperatures drop below 5°C then the chemical reaction required for cement to set is impeded, dramatically slowing the setting process. This will only return to normal when temperatures rise. Additionally, if the temperatures drop to below freezing before the grout has set, then the integrity and performance of the product will be compromised.

Where temperatures are in excess of 30°C, the set time of the product will be accelerated significantly, potentially making it difficult to use. When work must be undertaken in higher temperatures, every effort should be made to ensure the temperature of the air, background, water and products are kept as cool as possible.

CLEANING: All tools should be cleaned with water after use and before the product sets.

HEALTH AND SAFETY: For detailed information, please refer to and follow the advice stated on the SDS (Safety Data Sheet) which can be accessed on our website – www.kelmore.co.uk or alternatively by contacting Kelmore Ltd.

STORAGE AND SHELF LIFE: Grout Flex15 must be stored in unopened packaging, off the ground, and in cool, dry conditions. If stored in this way, the shelf life of this product is 18 months.

BS 5385, Parts 1-5: Grout Flex15 should be used in conjunction with work carried out under the British Standard Code of Practice for Wall and Floor Tiling.

UK CA CE EN 13888: CG2 WA

MINERALS

PORCELAIN & CERAMIC | FLOOR & WALL TILES

STONE ABSOLUTE

www.johnson-tiles.com

JOHNSON · TILES

MADE IN THE UK SINCE 1901

MINERALS

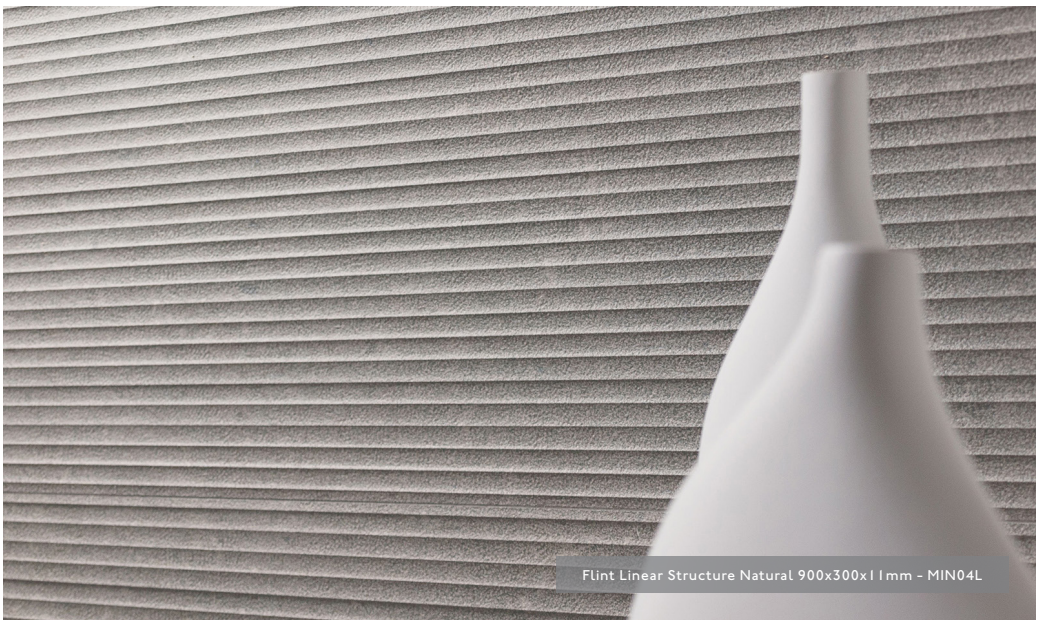
SIX COLOURS **FIFTEEN** SIZES **FOUR** FINISHES

Minerals offers an on-trend colour palette of six natural shades from Chalk to Charcoal, showcasing an elegant stone effect, perfect for tranquil spaces. Varied finishes include Natural, Bush Hammered, Grip and Grip+ 2cm to deliver on performance. With a wide selection of 11 size-formats available, ranging from strips of 600x50mm all the way up to 2700x1200mm, Minerals is versatile in its applications, with co-ordinating mosaics and skirtings also featured.

Experiment with texture with the Minerals ceramic wall tiles. Geometric patterning comes to the fore in three varied structures available across four neutral tones of Chalk, Dolomite, Limestone, and Flint. Dot structure adds soft circular detailing, Hexagon structure allows the interplay of light across its tactile surface, and Linear structure provides ridged profiling. Minerals is perfect for adding dimension to create a contemporary feature in any commercial interior.

Limestone Grip 1200x600x9mm - MIN03G

Pebble Grip+ 2cm 1200x1200x20mm - MIN06E



Flint Linear Structure Natural 900x300x11mm - MIN04L

Dolomite Hexagon Structure Natural
900x300x11mm - MIN02H

Chalk Natural Mixed Strip Mosaic 300x300mm - MIN11NM

Pebble Natural 2700x1200x6mm - MIN06N
Pebble Grip+ 2cm 1200x1200x20mm - MIN06E

Dolomite Dot Structure Natural 900x300x11mm - MIN02D

Chalk Natural 900x900x9mm - MIN01N

Limestone Dot Structure Natural
900x300x11mm - MIN03D

Dolomite Natural 600x600x9mm - MIN02N

Flint Natural 900x900x9mm - MIN04N
Flint Grip+ 2cm 900x900x20mm - MIN04E

CHALK LRV: 68

Product Code [Bla]: N MIN01N + B MIN01B + G MIN01G + E MIN01E *2cm* | Product Code [BIII]: N MIN1DN *Ductile*

Mosaic Code [Bla]: N MIN1NM + B MIN1BM + G MIN1GM | Fitting Code [Bla]: N MIN1NS + B MIN1BS

DOLOMITE LRV: 53

Product Code [Bla]: N MIN02N + B MIN02B + G MIN02G + E MIN02E *2cm* | Product Code [BIII]: N MIN2DN *Ductile*

Mosaic Code [Bla]: N MIN2NM + B MIN2BM + G MIN2GM | Fitting Code [Bla]: N MIN2NS + B MIN2BS

Note: All colour options shown on this page are available in all size-formats, mosaics & fittings (excluding 900x300mm).

Colours & Product Codes

V2: Low to Moderate Shade Variation

LIMESTONE LRV: 41

Product Code [Bla]: N MIN03N + B MIN03B + G MIN03G + E MIN03E 2cm | Product Code [BIII]: N MIN3DN *Ductile*

Mosaic Code [Bla]: N MIN3NM + B MIN3BM + G MIN3GM | Fitting Code [Bla]: N MIN3NS + B MIN3BS

PEBBLE LRV: 42

Product Code [Bla]: N MIN06N + B MIN06B + G MIN06G + E MIN06E 2cm | Product Code [BIII]: N MIN6DN *Ductile*

Mosaic Code [Bla]: N MIN6NM + B MIN6BM + G MIN6GM | Fitting Code [Bla]: N MIN6NS + B MIN6BS

Note: All colour options shown on this page are available in all size-formats, mosaics & fittings (excluding 900x300mm).

Colours & Product Codes

V2: Low to Moderate Shade Variation

FLINT LRV: 32

Product Code [BIa]: N MIN04N + B MIN04B + G MIN04G + E MIN04E *2cm* | Product Code [BIII]: N MIN4DN *Ductile*

Mosaic Code [BIa]: N MIN4NM + B MIN4BM + G MIN4GM | Fitting Code [BIa]: N MIN4NS + B MIN4BS

CHARCOAL LRV: 11

Product Code [BIa]: N MIN07N + B MIN07B + G MIN07G | Product Code [BIII]: N MIN7DN *Ductile*

Mosaic Code [BIa]: N MIN7NM + B MIN7BM + G MIN7GM | Fitting Code [BIa]: N MIN7NS + B MIN7BS

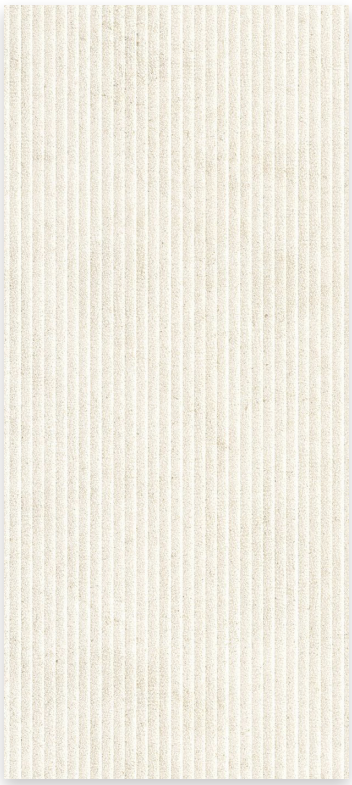
Note: All colour options shown on this page are available in all size-formats, mosaics & fittings (excluding 900x300mm).

Colours & Product Codes

V2: Low to Moderate Shade Variation

CHALK LRV: 68
DOT STRUCTURE
Product Code [BIII]: N MIN01D

CHALK LRV: 68
HEXAGON STRUCTURE
Product Code [BIII]: N MIN01H



CHALK LRV: 68
LINEAR STRUCTURE
Product Code [BIII]: N MIN01L

DOLOMITE LRV: 53
DOT STRUCTURE
Product Code [BIII]: N MIN02D

DOLOMITE LRV: 53
HEXAGON STRUCTURE
Product Code [BIII]: N MIN02H

DOLOMITE LRV: 53
LINEAR STRUCTURE
Product Code [BIII]: N MIN02L

Note: All colour options shown on this page are available in the 900x300mm size-format only.

Colours & Product Codes

V2: Low to Moderate Shade Variation

LIMESTONE LRV: 41
DOT STRUCTURE
Product Code [BIII]: [N] MIN03D

LIMESTONE LRV: 41
HEXAGON STRUCTURE
Product Code [BIII]: [N] MIN03H

LIMESTONE LRV: 41
LINEAR STRUCTURE
Product Code [BIII]: [N] MIN03L

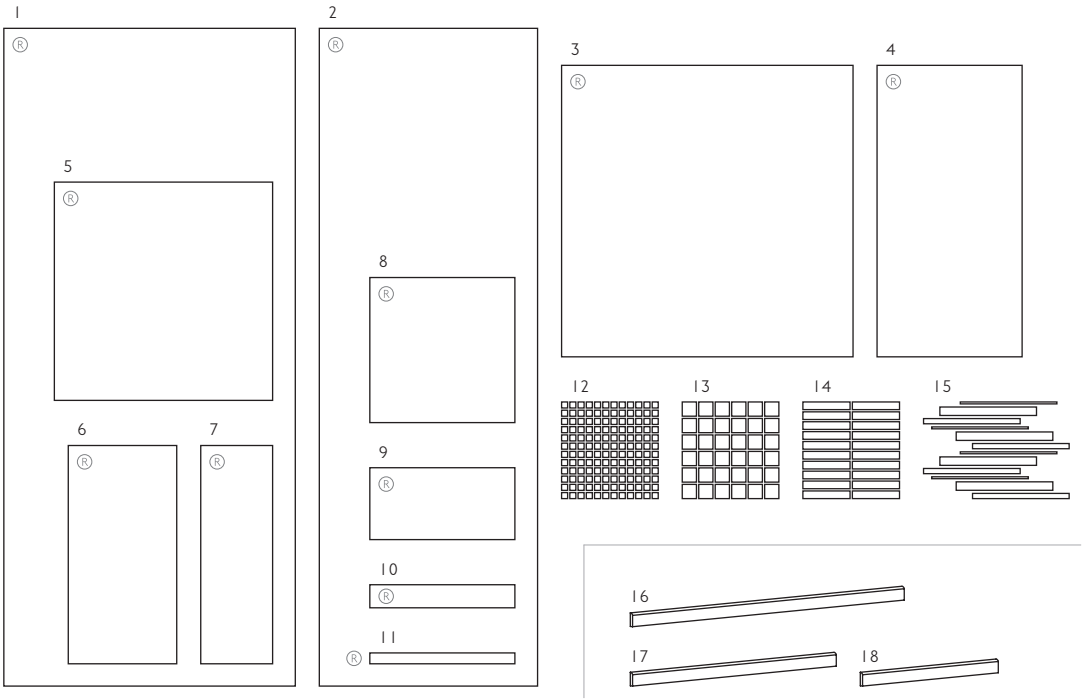
FLINT LRV: 32
DOT STRUCTURE
Product Code [BIII]: [N] MIN04D

FLINT LRV: 32
HEXAGON STRUCTURE
Product Code [BIII]: [N] MIN04H

FLINT LRV: 32
LINEAR STRUCTURE
Product Code [BIII]: [N] MIN04L

Note: All colour options shown on this page are available in the 900x300mm size-format only.

Size Formats
Sizing & Packing Information



#	Size	Thickness	Finish	Structure	Class	Pcs / Box	M2 / Box	Kg / Box
1	2700x1200mm	6mm	N	-	Bla	1 Tile	3.23 m²	45.50 kg
2	2700x900mm	6mm	N *Ductile*	-	BIII	1 Tile	2.42 m²	29.04 kg
3	1200x1200mm	9mm	N B G	-	Bla	1 Tile	1.44 m²	30.50 kg
		20mm	E *2cm*	-	Bla	1 Tile	1.44 m²	66.02 kg
4	1200x600mm	6mm	N *Ductile*	-	BIII	3 Tiles	2.16 m²	25.80 kg
		9mm	N B G	-	Bla	2 Tiles	1.43 m²	30.32 kg
5	900x900mm	9mm	N B G	-	Bla	2 Tiles	1.62 m²	34.00 kg
		20mm	E *2cm*	-	Bla	1 Tile	0.81 m²	37.09 kg
6	900x450mm	9mm	N B G	-	Bla	3 Tiles	1.21 m²	25.50 kg
7	900x300mm	11mm	N	Dot, Hexagon & Linear	BIII	4 Tiles	1.07 m²	17.60 kg
8	600x600mm	9mm	N B G	-	Bla	3 Tiles	1.07 m²	23.22 kg
9	600x300mm	9mm	N B G	-	Bla	6 Tiles	1.07 m²	22.00 kg
10	600x100mm	9mm	N B G	-	Bla	10 Tiles	0.59 m²	13.30 kg
11	600x50mm	9mm	N B G	-	Bla	20 Tiles	0.59 m²	13.30 kg
12	25x25mm Square Mosaic *300x300mm Sheet*	9mm	N B G	-	Bla	5 Sheets	0.44 m²	9.00 kg
13	50x50mm Square Mosaic *300x300mm Sheet*	9mm	N B G	-	Bla	5 Sheets	0.44 m²	9.00 kg
14	150x30mm Strip Mosaic *300x300mm Sheet*	9mm	N B G	-	Bla	5 Sheets	0.44 m²	9.00 kg
15	Mixed Sizes Strip Mosaic *300x300mm Sheet*	9mm	N B G	-	Bla	5 Sheets	0.44 m²	9.00 kg

#	Fitting	Thickness	Finish	Structure	Class	Pcs / Box	LM / Box	Kg / Box
16	1200x50mm Bevel Top Skirting	9mm	N B	-	Bla	5 Tiles	6.00 lm	7.00 kg
17	900x50mm Bevel Top Skirting	9mm	N B	-	Bla	5 Tiles	4.50 lm	5.50 kg
18	600x50mm Bevel Top Skirting	9mm	N B	-	Bla	5 Tiles	3.00 lm	3.00 kg

Key to Finishes: N Natural B Bush Hammered G Grip E Grip+ *2cm*

Note: Porcelain Tiles [Bla] and Ceramic Tiles [BIII]. For more information please see the suitability advice given in the technical section. All sizes indicated are metric modular. All sizes shown are nominal. For the most up-to-date size, colour and finish availability, please visit our website - www.johnson-tiles.com. (R) Rectified Edge.

Technical, Sustainability & Important Information

Specification

Range	Finish	Wall Suitability	Floor Suitability	Wet Barefoot	CSV	Material / Class
Minerals	(N) Natural	Internal & External	Internal Only	-	V2	Porcelain [BIa]
		Internal Only	-	-	V2	Glazed Ceramic [BIII]
	(B) Bush Hammered	Internal & External	Internal & External	Yes	V2	Porcelain [BIa]
	(G) Grip	Internal & External	Internal & External	Yes	V2	Porcelain [BIa]
	(E) Grip+ 2cm	-	Internal & External	Yes	V2	Porcelain [BIa]

Floor Values

Finish	Colour	PTV (4S)	PTV (TRL)	R Value	Wet Ramp	PEI	Traffic
(N) Natural	All Colours	Dry 36+ Wet 25 - 35	-	R9	A	-	Commercial
(B) Bush Hammered	All Colours	Dry 36+ Wet 36+	Wet 36+	R10	B	-	Commercial
(G) Grip	All Colours	Dry 36+ Wet 36+	Wet 36+	R11	C	-	Commercial
(E) Grip+ 2cm	All Colours	Dry 36+ Wet 36+	Wet 36+	R11	C	-	Commercial

Physical Properties - Porcelain [BIa]

Test & Standard	Requirement	Test Result	Test & Standard	Requirement	Test Result
Length / Width EN ISO 10545 - 2	± 0.6% ≤ ± 2mm	**Pass**	**Modulus of Rupture** EN ISO 10545 - 4	Min. 35N / mm²	**≥ 35N / mm²**
Thickness EN ISO 10545 - 2	± 5% ≤ ± 0.5mm	**Pass**	**Thermal Shock** EN ISO 10545 - 9	Pass	**Pass**
Straightness of Side EN ISO 10545 - 2	± 0.5% ≤ ± 1.5mm	**Pass**	**Frost Resistance** EN ISO 10545 - 12	Resistant	**Resistant**
Rectangularity EN ISO 10545 - 2	± 0.5% ≤ ± 2mm	**Pass**	**Chemical Resistance** EN ISO 10545 - 13	Min. Class B	**Pass**
Surface Flatness EN ISO 10545 - 2	± 0.5% ≤ ± 2mm	**Pass**	**Stain Resistance** EN ISO 10545 - 14	Min. Class 3	**Class 5**
Water Absorption EN ISO 10545 - 3	≤ 0.5%	**≤ 0.5%**	**Fire Rating**	-	**Class A1FL Non Combustible**
Weight / M²	**14.09 kg** 6mm thick	**21.19 kg** 9mm thick	**45.85 kg** 20mm thick		

Physical Properties - Ceramic [BIII]

Test & Standard	Requirement	Test Result	Test & Standard	Requirement	Test Result
Length / Width EN ISO 10545 - 2	± 0.5% ≤ ± 2mm	**Pass**	**Modulus of Rupture** EN ISO 10545 - 4	Min. 15N / mm²	**≥ 15N / mm²**
Thickness EN ISO 10545 - 2	± 10% ≤ ± 0.5mm	**Pass**	**Thermal Shock** EN ISO 10545 - 9	Pass	**Pass**
Straightness of Side EN ISO 10545 - 2	± 0.3% ≤ ± 1.5mm	**Pass**	**Frost Resistance** EN ISO 10545 - 12	-	**Not Suitable**
Rectangularity EN ISO 10545 - 2	± 0.5% ≤ ± 2mm	**Pass**	**Chemical Resistance** EN ISO 10545 - 13	Min. Class B	**Class A**
Surface Flatness EN ISO 10545 - 2	± 0.5% ≤ ± 2mm	**Pass**	**Stain Resistance** EN ISO 10545 - 14	Min. Class 3	**Class 5**
Water Absorption EN ISO 10545 - 3	10% to 20%	**10% to 20%**	**Fire Rating**	-	**Class A1 Non Combustible**
Weight / M²	**10.68 kg** 6mm thick *Ductile*	**16.45 kg** 11mm thick			

Sustainability Information

Range	Material / Class	EPD	Recycled Content of the Tiles	Recycled Content of the Packaging	Recyclable Content of the Packaging
Minerals	Porcelain [BIa]	Yes	Up to 30%	Up to 100% (Boxes)	Up to 100% (Boxes)
	Ceramic [BIII]	Yes	Up to 30%	Up to 100% (Boxes)	Up to 100% (Boxes)

Note: Due to the manufacturing process of all floor tiles there may be small variations in slip resistance. Given this, please refer to our website for the most up-to-date information. The slip resistance properties of a surface can only be maintained with the implementation of an effective regular cleaning and maintenance regime. The frequency of cleaning should be determined by the property manager based on the potential level of surface contaminants. The need for an additional regular cleaning and maintenance regime is further heightened when tiles are used for external floor and wet barefoot applications. Please contact our Technical Advice Helpline for specification and installation advice. All Porcelain [BIa] and Ceramic [BIII] products shown in this overview conform to BS EN 14411. CSV: Colour Shade Variation. PTV (4S): Pendulum Test Value - Slider 96. PTV (TRL): Pendulum Test Value - Slider 55. R Value (DIN 51130). Wet Ramp (DIN 51097). PEI: Porcelain Enamel Institute. EPD: Environmental Product Declaration. For a full company sustainability overview please visit www.johnson-tiles.com/about/sustainability.

Technical, Sustainability & Important Information

Important Information

During the manufacturing process of ceramic and porcelain tiles, some variation in shade and pattern can occur. Before fixing any tiles; several boxes should be opened and their contents mixed to ensure that size, colour, shade and patterning are acceptable. The tiles shown are quality products and conform to the physical properties listed. For a comprehensive colour, size and finish overview along with full technical and sustainability information for all of the product shown in this product presenter, please visit our website - www.johnson-tiles.com.

- All sizes shown are metric modular.
- For specific suitability details please contact our Technical Advice Helpline.
- Johnson Tiles cannot accept responsibility for tiles that have been fixed.
- Every effort has been made to ensure the accuracy of the information given.
- Johnson Tiles reserves the right to change specification and availability information without prior notice.
- Nothing in these statements does/will affect the statutory rights of the consumer.

bsi. ISO 9001 Quality Management FM26818 | ISO 14001 Environmental Management EMS40817 | BES 6001 Responsible Sourcing of Construction Products

All product technical values quoted in this product presenter are supported by laboratory testing from our own and independent ceramic test houses. Johnson Tiles are British Standard registered and all products conform to the standards set in BS EN 14411.

For the reassurance of single-source supply, Johnson Tiles offers a free of charge NBS M40 specification writing service featuring a range of tile fixing products. To find out more or for any questions or queries relating to any tile related technical information featured in this product overview, please contact our Technical Advice Helpline on +44 (0)1782 524 111 or email ddunlop@johnson-tiles.com

The colours shown in this product overview are as accurate as printing processes will allow. Please refer to actual product samples before specifying. Every effort has been made to ensure the accuracy of the information given.

Flint Natural 900x900x9mm - MIN04N
Flint Linear Structure Natural 900x300x11mm - MIN04L

Installation Advice

Codes of Practice
All fixing of floor and cladding tiles should be in accordance with the following codes of practice guidelines:

BS5385 Part 1 - 2018
Design and installation of internal ceramic, natural stone and mosaic wall tiling in normal conditions.

BS5385 Part 2 - 2015
Design and installation of external ceramic, natural stone and mosaic wall tiling in normal conditions.

BS5385 Part 3 - 2014
Design and installation of internal and external ceramic and mosaic floor tiling in normal conditions.

BS5385 Part 4 - 2015
Design and installation of ceramic and mosaic tiling in specific conditions.

BS5385 Part 5 - 2009
Design and installation of terrazzo, natural stone, and agglomerated stone tile and slab flooring.

BS8000 Part 11 - 2011
Workmanship on building sites. Internal and external wall and floor tiling. Ceramic and agglomerated stone tiles, natural stone and terrazzo tiles and slabs and mosaics.

BIII (Ceramic) tiles smaller than 400x300mm require the use of an adhesive with a D1 or D2 classification. Larger tiles require an adhesive with C2 classification.

BIa (Porcelain) tiles require the use of a polymer modified adhesive with a classification of C2* and grouts specifically formulated for the fixing and grouting of porcelain tiles.

** Check with the adhesive manufacturer for additional C1 product suitability.*

Substrates
Before tiling is commenced it is important to ensure that the correct minimum curing periods have been observed for all substrates:

Concrete (6 Weeks)
Screed - Non Modified (3 Weeks)
Rendering - Non Modified (2 Weeks)
Gypsum Plastering (4 Weeks)
Brickwork / Block-work (6 Weeks)

Accuracy of the substrate must be checked to ensure that the guidance given in BS5385 has been achieved i.e. "local variations in level for a nominally flat floor or wall should be such that, when checked with a 2m straight-edge, any gap under the straight-edge between points of contact does not exceed 3mm".

Movement Joints
The location, type and scope of all movement joints must be ascertained prior to any fixing works. All structural joints must be followed through to the face of the tile at full width with intermediate movement joints (minimum 6mm wide) being situated at:

Changes of Plane (Incl. Wall Corners)
Wall / Floor Junctions
Where Tiling Abuts Other Materials

Additionally at 3 to 4.5m maximum centres for wall tiling and 8 to 10m maximum bay centres for floor tiling (in suspended floors the bay dimensions should be reduced by providing additional joints over supporting walls and beams).

Movement joints can either be filled with a suitable backer, bond breaker and filler (e.g. silicone for walls tiles only or epoxy polysulphide for floor and wall tiles – please check with manufacturer for suitability) or be of the pre-formed variety.

Design / Layout
Consideration to locations of plane changes and room sizes should be undertaken to ensure the best tile size is selected to minimise cutting and improve aesthetics.

Adhesives
Adhesives should be in accordance with BS EN 12004, Class D1 or D2 for ceramic tiles and Class C2 or C1* for porcelain tiles. Particular adhesive choice will be governed by the type of substrate.

** Check with the adhesive manufacturer for additional C1 product suitability.*

Johnson Tiles recommends the use of the following adhesive products - see below:

Ceramic Tiles (BIII)

Substrate	Product
Concrete	One Part Flexible
Sand / Cement Screed	One Part Flexible
Brick / Block-work	One Part Flexible
Plaster Gypsum	One Part Flexible
Plasterboard	One Part Flexible

Porcelain Tiles (BIa)

Substrate	Product
Concrete	Rapid Porcelain / Flexible
Sand / Cement Screed	Rapid Porcelain / Flexible
Wood Floors	Rapid Porcelain / Flexible*
Brick / Block-work	Rapid Porcelain / Flexible
Plaster Gypsum	Rapid Porcelain / Flexible
Plasterboard	Rapid Porcelain / Flexible**

** Overlay with minimum 15mm WBP / Marine Ply and Prime using an adequate Prime and Seal.*

*** Prime using an adequate Prime and Seal.*

Grouts
The choice of grout type should reflect the expected service conditions of the installation.

For general internal wall tiling in dry conditions and walls subject to frequent wetting i.e. showers and pool halls, use an adequate 4 in 1 Cement Based Grout - classified as CG2.

For walls where hygiene is important i.e. commercial kitchens and hospitals, use an adequate Super Epoxy Grout - classified as RG1.

For general floor tiling use an adequate 4 in 1 Flexible Wall and Floor Tile Grout - classified as CG2.

For floors subject to frequent wetting i.e. showers and pool halls, use an adequate 4 in 1 Flexible Wall and Floor Tile Grout - classified ad CG2 (hard water areas) or an adequate Super Epoxy Grout - classified as RG1 (soft water areas).

For specific fixing advice, please contact our technical advice helpline on +44 (0)1782 524 111 or email ddunlop@johnson-tiles.com.

Fixing Tiles
All tiles should be fixed with a solid bed of adhesive, this ensures maximum durability and strength within the installation and long term adhesion performance. This is achieved with the use of a notched solid bed trowel. It is good practice to periodically remove a recently fixed tile to ensure that the correct bedding is being achieved and maintained. When fixing all tiles care must be taken to ensure that no lipping of tiles occurs.

All tiles shown in this brochure are recommended to be fixed with a nominal 3mm wide joint.

Cleaning and Maintenance

Maintaining the appearance and characteristics (especially slip resistance values) of floor tiles is achieved with the implementation of a suitable cleaning regime. It must be stressed that the cleaning material manufacturers instructions must be followed at all times. Regular and correctly undertaken cleaning should maintain a flooring product as close to its original state as possible. Incorrect or infrequent cleaning will adversely affect the properties of the flooring material and increase potential hazards. Generally the smoother the surface of the tile the easier it is to clean. However, it should be noted that textured products, required to give adequate slip resistance when wet, can be satisfactorily cleaned – the cleanability of a surface is more a function of the contaminant than the texture of the surface. It is therefore essential when selecting and specifying a floor finish that the use of the area and likely contaminants, safety, aesthetic and hygiene requirements are all taken into account at the specification stage.

Cleaning can be split into several categories, each of which is dependant upon installation type (i.e. wet barefoot areas, shopping malls, public toilets, etc.) and frequency of usage (i.e. high, medium or low traffic):

Builders Clean
This should be undertaken before a floor is being brought into service. The builders clean removes any residual film leftover from the grouting operation and is a one-off cleaning process. This must be carried out as any grout residues left behind will act as a key for dirt resulting in the installation being difficult to clean. Temporary sealers may be used to facilitate cleaning off after laying which can be removed with the use of alkaline detergents.

Cementitious Grouts
The use of a mild acid de-cementing solution followed by thorough rinsing will remove all but the most stubborn of cement residues.

Epoxide Grouts
It is essential that ALL residue must be removed from the surface of the tiles during the grouting process and before the resin cures. Failure to achieve this will result in a very difficult and expensive process using gel-type epoxide removers.

Routine Cleaning
The regular use of detergents or other cleaning agents, which are excessively acidic or alkaline could cause irreversible damage to the ceramic tile surface. Degreasing agents that contain wax, sodium silicate or other additives which leave sticky deposits and thus retain dirt should be avoided. Oil residues or build-ups of wax can be removed with a proprietary wax and polish remover.

Manual Cleaning
In normal conditions tiles require little maintenance and can be easily kept clean by sweeping and then mopping with warm water to which a neutral or nearly neutral detergent has been added. The cleaning solution should remain on the floor for 5 to 15 minutes (see manufacturers instructions) to allow it to penetrate and emulsify the dirt after which it should be removed by rinsing thoroughly with clean water. The rinsing process removes the dirt so the use of clean water is important.

Mechanical Cleaning
For larger floor areas or areas of textured tiles the use of a rotary scrubbing machine is recommended (machines should not be used at speeds in excess of 450rpm). The choice of brush type is very important. Union mix brushes are suitable for light washing and scrubbing, polypropylene brushes are suitable where dirt deposits are especially heavy. The cleaning solution should remain on the floor for 5 to 15 minutes (see manufacturers instructions) after which a secondary scrubbing action and clean mop or suction should be undertaken to remove the solution and dirt.

High Pressure Cleaning
Tiles seldom require the use of high-pressure cleaning. Whilst the process will not damage the tiles care must be taken to avoid erosion of the grout. To minimise grout erosion ensure that the water beam is continually moved from side to side and not allowed to concentrate on the grouted joints. Water containing abrasives or steam cleaners should not be used on ceramic tiles.

Wet Areas
Wet barefoot areas may attract build-ups of body fats, soaps, oil residues and organic growth. To prevent these a mildly acidic cleaning agent used regularly is preferable. If build-up has been allowed a preliminary deep clean with a proprietary cleaner is required followed by regular use of a mildly acidic cleaning agent solution.

Periodic Deep Cleaning
Occasionally foreign matter may cause surface marks that cannot be removed with the usual cleaning processes and materials. If the surface mark cannot be removed, other materials should be considered (it's advisable to experiment on a small inconspicuous area):

Paint - Paint Remover
Organic Stains - Bleach / Washing Soda
Rust - Masonry Cleaner
Oil / Fat / Grease - Detergent or Degreaser
Mould Growth - Bleach / Proprietary Cleaner
Tea / Coffee / Ink - Bleach / Proprietary Cleaner

Abrasive powders or cleaners should never be used on glazed or polished tiles.

For more information about **Minerals** or any of our other product ranges simply visit

www.johnson-tiles.com

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Launched: January 2016 - Updated: January 2024

www.johnson-tiles.com

JOHNSON · TILES
MADE IN THE UK SINCE 1901

TECHNICAL DATA SHEET

MoreFlex Standard S1

01/01/24

Kelmore's More*Flex* Standard S1 is a highly polymer modified, flexible, standard setting, cementitious tile adhesive for walls and floors. This deformable adhesive has excellent bond strength and flexibility ensuring numerous types of tiles, such as porcelain, ceramic and most natural stone can be confidently fixed to a wide range of backgrounds, including those subject to limited movement and vibration. Allowing bed depths up to 15mm, More*Flex* Standard S1 has a long pot life of 4 hours and an excellent open time of 40 minutes, whilst still being set and ready for grouting after 16 hours. Showing its true versatility, this adhesive is suitable for interior and exterior use, as well as in wet areas, including swimming pools, and it is particularly recommended for fixing large format tiles. More*Flex* Standard S1 has been manufactured to the highest of standards using unique technologies, extensive knowledge and outstanding raw materials. When compared to the production of traditional cementitious adhesives, this results in a significant reduction in CO_2 emissions.

MoreFlex Standard S1

Classification *(EN 12004)*		C2 TE S1
Pack Size		20kg
Colours		White and Grey
Water required per 20kg bag		White - Approximately 5.0 litres Grey - Approximately 4.8 litres
Application Temperature (air and background)		≥ 5˚C
Bed Thickness		Up to 15mm
@20˚C	Set Time (Grout After) Pot Life Open Time	16 hours 4 hours 40 minutes
Consumption per mm bed thickness		Approximately 1.25kg /m²
Temperature Resistance (cured adhesive)		-30˚C to 90˚C

Areas of Use

Walls	Interior	Wet Areas	Domestic	Water Piped Underfloor Heating	Limited Movement/Vibration
Floors	Exterior	Dry Areas	Commercial	Electric Underfloor Heating	

Suitable Tiles

Porcelain	Ceramic	Natural Stone (non-moisture sensitive)	Glass (mosaics only)	Terrazzo	Brick Slips

Kelmore Ltd, The Dell, Berry Way, Chorley, PR7 6RA
Tel: **01257 830511** Email: **technical@kelmore.co.uk**

Kelmore

MoreFlex Standard S1

Suitable Wall Backgrounds					PRIMER REQUIRED
A Cement:Sand Render	A Concrete Blockwork	A Plaster (Finish Coat)	A Plasterboard	A Tile Backer Boards	PrimeMore Universal

Suitable Floor Backgrounds				PRIMER REQUIRED
A Cement:Sand Screed (inc. Heated)	A Concrete	A Plywood Overlay (Class 3)	A Tile Backer Boards	PrimeMore Universal
B Asphalt (Flooring Grade)	B Epoxy DPM	B Existing Ceramic, Porcelain, and Natural Stone Tiles	B Existing Vinyl Flooring	PrimeMore Grip
C Calcium Sulphate/Anhydrite Screed (inc. Heated)				PrimeMore CS

A Prime with one coat of PrimeMore Universal diluted 1:3 with water. Depending on the porosity of the background, additional diluted coats may be required.

B Prime with one neat, undiluted coat of PrimeMore Grip.

C Prime with one neat, undiluted coat of PrimeMore CS.

The primer must be allowed to dry before applying tile adhesive.

BACKGROUND AND SURFACE PREPARATION

Backgrounds must be sufficiently dry and strong enough to carry the total weight being applied. All surfaces must be clean, sound, flat and free from contaminants that could inhibit adhesion, such as dust, dirt, oil, grease, laitance, and curing agents. Timber bases must be adequately ventilated and able to carry the additional static and dynamic load without deflection. Moisture sensitive backgrounds in wet locations will need protecting using Kelmore's waterproofing systems.

Guidance notes on suitable wall backgrounds

Prime the following backgrounds with one coat of PrimeMore Universal diluted 1:3 by volume with clean water (1 part PrimeMore Universal to 3 parts clean water).

***Depending on the porosity of the background, additional diluted coats of PrimeMore Universal may be required.**

All priming coats must be allowed to dry before applying additional coats and before applying tile adhesive.

***CEMENT:SAND RENDER:** Must be true and firmly bonded to the background. It should be prevented from rapid drying before being allowed to air dry in good conditions for a minimum of 2 weeks.

***CONCRETE BLOCKWORK:** Must be true and flat and be allowed to dry for a minimum of 6 weeks.

PLASTER: Tiles should be fixed only to a finish coat of plaster. Ensure it is dry, sound, free from any loose or weak material and well adhered. If a backing coat as well as a finish coat has been applied, this must be allowed to dry for a minimum of 4 weeks. Plaster that has been overly trowelled should always be brushed down with a stiff brush. Maximum permitted weight when tiling on plaster is 20kg/m^2.

PLASTERBOARD: Boards fixed to timber studwork must be of sufficient thickness, securely fixed and rigid. Where boards are directly bonded to solid walls, allow the board adhesive to fully set before tiling. Maximum permitted weight when tiling onto bare plasterboard is 32kg/m^2.

***TILE BACKER BOARDS:** Ensure the boards are installed as instructed by the manufacturer. Boards fixed to timber studwork must be of sufficient thickness, securely fixed and rigid. Where boards are directly bonded to solid walls, ensure the adhesive has fully set and that any mechanical fixings, as instructed by the manufacturer, have been used. Proprietary boards will have varying weight limits - check with the manufacturer.

Guidance notes on suitable floor backgrounds

Prime the following backgrounds with one coat of Prime*More* Universal diluted 1:3 by volume with clean water (1 part Prime*More* Universal to 3 parts clean water).

***Depending on the porosity of the background, additional diluted coats of Prime*More* Universal may be required.**

All priming coats must be allowed to dry before applying additional coats and before applying tile adhesive.

***CEMENT:SAND SCREED:** Allow newly installed screeds to dry for a minimum of 3 weeks. Direct fixing of agglomerate and some natural stone tiles will require extended drying times. *For preparation and drying times of proprietary cementitious screeds, follow the guidance of the manufacturer.*

***HEATED CEMENT:SAND SCREED:** New heated screeds must be commissioned from 3 weeks after screed installation and before work commences. The screed should be heated slowly at a maximum rate of 5°C per day until the maximum operating temperature (as recommended by the heating manufacturer) is reached. Hold this temperature for 3 days before allowing the screed to cool. The underfloor heating should be turned off or in cold weather run so that the screed is held at a maximum 15°C whilst tiling commences. *All proprietary cementitious screeds should be commissioned and prepared in accordance with the recommendations of the screed manufacturer.*

***CONCRETE:** Allow new concrete to cure before being subjected to continuous air drying in good conditions for a minimum of 6 weeks. Power floated concrete should be mechanically prepared by suitable means to provide a clean, sound, micro-textured, dust free surface.

PLYWOOD OVERLAY (CLASS 3): Ensure the subfloor is rigid, flat, dry and adequately ventilated. The plywood must be a minimum 15mm thick and be conditioned to the appropriate moisture content for the environment. Screw fix at a maximum 300mm centres.

***TILE BACKER BOARDS:** Ensure the boards are installed as instructed by the manufacturer and that they are securely fixed to rigid, suitable, prepared bases. Where the boards have been installed on solid bases using tile adhesive, ensure the adhesive has fully set before commencing tiling.

Prime the following backgrounds with one neat, undiluted coat of Prime*More* Grip. Allow the primer to dry before applying tile adhesive.

FLOORING GRADE ASPHALT: Must be hard, sound and firmly adhered.

EPOXY DPM: Must be a flooring grade that is compatible with cementitious products. Ensure that it is hard, sound and firmly adhered.

EXISTING CERAMIC, PORCELAIN, AND NATURAL STONE TILES: Must be in good condition, free from contaminants and well bonded. Ensure the existing structure can take the additional weight of the new tiling.

EXISTING VINYL FLOORING: Only hard vinyl can be tiled over (cushion vinyl is not suitable and will need to be removed). Ensure it is in good condition, free from contaminants and well bonded.

Prime calcium sulphate/anhydrite screeds with one neat, undiluted coat of Prime*More* CS. Allow the primer to dry before applying tile adhesive.

CALCIUM SULPHATE/ANHYDRITE SCREED: All laitance and surface contaminants must be completely removed. The screed must be confirmed adequately dry, no greater than 85% Relative Humidity (RH).

HEATED CALCIUM SULPHATE/ANHYDRITE SCREED: All laitance and surface contaminants must be completely removed. New heated screeds must be commissioned from 7 days after screed installation and before work commences. The screed should be heated slowly and in accordance with the recommendations of the screed manufacturer. Ensure the moisture content of the screed is no greater than 85% Relative Humidity (RH).

ADDITIONAL INFORMATION

- It is recommended that electric underfloor heating cables/mats are encased within a Kelmore levelling and smoothing compound. The compound must be suitable for use with the background/base to which the heating system has been fitted.
- After completing installations on backgrounds incorporating underfloor heating, the heating system should not be run for 10 days. Following this period, the floor temperature must be gradually raised to its optimal operating temperature.

Kelmore

MoreFlex Standard S1

Mixing

More*Flex* Standard S1 should be mixed with clean, cold water. White requires approximately 5.0 litres and Grey approximately 4.8 litres per 20kg bag. The amount of water used in the initial mixing can be adjusted slightly to obtain the optimum adhesive consistency for the specific application but must always remain slump-free.

Pour the water into a clean bucket before gradually adding the powder. Mix thoroughly until a smooth, creamy, slump-free consistency is achieved. To maximise the pot life, open time and workability, allow the mixed adhesive to stand for 2 minutes then re-mix briefly before use.

Application

More*Flex* Standard S1 can be used up to 15mm thick. Apply the mixed adhesive to the wall or floor before using a notched trowel to serrate consistent, straight ribs of adhesive. Bed in the tiles within the open time ensuring good contact with the adhesive. The adhesive coverage behind the tile must be sufficient for the given application and specific tile being fixed. Any adhesive that forms a skin must be removed and fresh adhesive re-applied.

Where solid bed fixing is required, as far as possible the adhesive under the tile should be free of voids and fully supported. To achieve this, in addition to trowelling the background, the tile may also require back buttering or trowelling.

Clean any adhesive from the tile face and grout joints as work proceeds and before the adhesive has set.

Coverage

Will vary dependent on the flatness of the background, the profile of the tile back and the adhesive bed thickness. To cover 1m^2, approximately 1.25kg of powder will be required for every mm thickness of solid bed adhesive. This equates to the following approximate coverage per 20kg bag:

Adhesive Thickness	1.5mm	2mm	2.5mm	3mm	4mm	5mm
Approximate Coverage	10.6m^2	8m^2	6.4m^2	5.3m^2	4m^2	3.2m^2

Grouting

Allow the adhesive to set before grouting using a suitable Kelmore grout. More*Flex* Standard S1 has been formulated to set in 16 hours when tested to the industry standard temperature of 20°C. Please be aware that higher temperatures will shorten the set time and lower temperatures will extend the set time.

NOTES: All cementitious adhesives should only be used when the temperature (air and background) is 5°C or above. If temperatures drop below 5°C then the chemical reaction required for cement to set is impeded, dramatically slowing the setting process. This will only return to normal when temperatures rise. Additionally, if the temperatures drop below freezing before the adhesive has set, then the integrity and performance of the adhesive will be compromised.

Where temperatures are in excess of 30°C, the set time of the product will be accelerated significantly, potentially making it difficult to use. When tiling must be undertaken in higher temperatures, every effort should be made to ensure the temperature of the air, background, water and products are kept as cool as possible.

CLEANING: All tools should be cleaned with water after use and before the product sets.

HEALTH AND SAFETY: For detailed information, please refer to and follow the advice stated on the SDS (Safety Data Sheet) which can be accessed on our website – www.kelmore.co.uk or alternatively by contacting Kelmore Ltd.

STORAGE AND SHELF LIFE: More*Flex* Standard S1 must be stored in unopened packaging, off the ground, and in cool, dry conditions. If stored in this way, the shelf life of this product is 12 months.

BS 5385, Parts 1-5: More*Flex* Standard S1 should be used in conjunction with work carried out under the British Standard Code of Practice for Wall and Floor Tiling.

UK CA CE EN 12004: C2 TE S1

Safety Data Sheet
More*Flex* Standard S1 - White

according to Regulation (EC) No.1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758 and UK SI 2020/1567

Date of issue: 21/04/2023 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Trade name : More*Flex* Standard S1 - White

Type of product : Powder

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

1.2.1. Relevant identified uses

Main use category : Consumer use, Professional use, Industrial use

1.2.2. Uses advised against

None identified

1.3. Details of the supplier of the safety data sheet

Manufacturer

Kelmore Ltd
The Dell
Berry Way
Chorley
PR7 6RA

e-mail address of person responsible for this SDS: info@kelmore.co.uk

1.4. Emergency telephone number

Telephone number : +44 (0) 1257 830511 *Office hours only

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to UK CLP/GHS

Skin corrosion/irritation – Category 2	H315
Serious eye damage/eye irritation – Category 1	H318
Specific target organ toxicity — Single exposure, Category 3	H335

Full text of H statements : see section 16

See section 11 for more detailed information on health effects and symptoms.

2.2. Label elements

Hazard Pictograms :

Signal Word : Danger

Hazard Statements : H315 – Causes skin irritation.
: H318 – Causes serious eye damage.
: H335 – May cause respiratory irritation.

Precautionary statements : P261 – Avoid breathing dust.
: P264 – Wash contaminated skin thoroughly after handling.
: P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

: P501 - Dispose of contents and container in accordance with national regulations.

Hazardous ingredients : Portland Cement

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Type
Cement, portland	(CAS-No.) 65997-15-1 (EC-No.) 266-043-4	20 - 30	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1] [2]
Sand (Silicon dioxide)	(CAS-No.) 14808-60-7 (EC-No.) 238-878-4	30 - 40	Not classified	[2]
Calcium carbonate	(CAS-No.) 1317-65-3 (EC-No.) 215-279-6	15 - 30	Not classified	[2]

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : If skin irritation occurs: Get medical advice/attention. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.

First-aid measures after eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes.Chemical burns must be treated promptly by a physician.

First-aid measures after ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain, watering, redness

Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing

Skin Contact : Adverse symptoms may include the following: pain, irritation, redness, blistering

Ingestion : Adverse symptoms may include the following: stomach pains

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled

Specific treatments : No specific treatment

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use dry chemical powder

Unsuitable extinguishing media : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

5.2. Special hazards arising from the substance or mixture

Hazards from the substance or mixture : May form explosible dust-air mixture if dispersed.

Hazardous combustion products : Toxic fumes may be released.

5.3. Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Emergency procedures : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Protective equipment : Put on appropriate personal protective equipment

6.1.2. For emergency responders

Emergency procedures : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Clean up immediately by sweeping or vacuum. Avoid dust generation.

Other information : Dispose of materials or solid residues at an authorized site or via a licensed waste disposal contractor.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Wear personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Heat sources.

Incompatible materials : Sources of ignition.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

Product/ingredient name	Exposure limit values
Cement, portland, chemicals (65997-15-1)	**EH40/2005 WELs (Fourth edition, 2020) United Kingdom (UK)** TWA: 10 mg/m³ 8 hours. Form: inhalable dust TWA: 4 mg/m³ 8 hours. Form: respirable dust
Calcium Carbonate (1317-65-3)	**EH40/2005 WELs (Fourth edition, 2020) United Kingdom (UK)** TWA: 10 mg/m³ 8 hours. Form: inhalable dust TWA: 4 mg/m³ 8 hours. Form: respirable dust
Silicon dioxide (14808-60-7)	**EH40/2005 WELs (Fourth edition, 2020) United Kingdom (UK)** TWA: 0.1 mg/m³ 8 hours. Form: respirable dust

8.1.2 Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards.

8.1.3 Air contaminants formed
No additional information available

8.1.4 DNEL AND PNEC
No additional information available

8.2. Exposure controls
Appropriate engineering controls:

Use only with adequate ventilation. Do not breathe dust. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment:

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: disposable particulate mask(P2)(EN143)

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Off white
Odour	: Odourless
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not relevant
Freezing point	: Not relevant
Boiling point	: Not relevant
Flash point	: Not relevant
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available

Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.28 g/cm³
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Stable under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7). Prevent dust accumulation.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Based on available data, the classification criteria are not met.
Acute toxicity (dermal)	: Based on available data, the classification criteria are not met.
Acute toxicity (inhalation)	: Based on available data, the classification criteria are not met.
Skin corrosion/irritation	: Causes skin irritation
Serious eye damage/irritation	: Causes serious eye damage
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Endocrine disrupting properties	: Based on available data, the classification criteria are not met.
Other information	: Not available

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	: Not classified. (Based on available data, the classification criteria are not met)
Chronic aquatic toxicity	: Not classified. (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties
No known significant effects or critical hazards.

12.6. Other adverse effects
No known significant effects or critical hazards.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user
Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
UK (GB)/REACH

Contains no REACH substances Annex XIV - List of substances subject to authorization

Contains no REACH substances with Annex XVII restrictions

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Abbreviations and acronyms:

ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
vPvB = Very Persistent and Very Bioaccumulative

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, the above named supplier does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

4. As Built Drawings

N/A

5. Testing & Commissioning Results and Certificates

N/A

6. Operation

N/A

7. Maintenance Procedures and Planned Maintenance

Cleaning and Maintenance Regimes

This maintenance schedule for Panattoni - Poyle and is to be followed from 16th September 2024 year on year to ensure all plant and equipment is kept within warranty.

Please keep a log of these inspections so that records can be checked should an issue arise.

Item	Daily	Weekly	Monthly	3 Months	6 Months	9 Months	Annually	5 Yearly	Certificates	Regime
Wall Tiles		✓								General Clean – Warm Soapy Water
Floor Tiles		✓								General Clean – Warm Soapy Water

5.0 Maintenance / cleaning details

Item	Frequency of maintenance/ cleaning	Maintenance / cleaning regime
FLOOR TILES	WHEN REQUIRED	ANY LOOSE DIRT OR GRIT SHOULD BE REMOVED FIRST BY SWEEPING, FOLLOWED BY WASHING WITH WARM WATER TO WHICH A LOW NEUTRAL SULPHATE DETERGENT HAS BEEN ADDED.
WALL TILES	WHEN REQUIRED	GENTLY WIPE WITH A DRY CLOTH TO REMOVE ANY SURFACE DIRT, WASH WITH WARM WATER AND A LOW NEUTRAL SULPHATE DETERGENT RINSE AND POLISH WITH A SOFT DRY CLOTH. **DO NOT** USE ABRASIVE CLEANERS

8. Spares Information

Contact Supplier for spares

9. Guarantees and Warranties

N/A

10. Replacement Strategy

Contact Suppliers regarding replacements

11. Demolition Decommissioning or Disposal

Disposal Considerations

Grout Flex15

Methods of disposal
The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste
Yes

Special precautions
This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

More*Flex* Standard S1

Methods of disposal
The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste
Yes

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This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.