



# SUPER-FLEX FLOOR TILE ADHESIVE

ISSUE – SFCTA / 0605

**QUICK-SETTING HIGH  
EARLY STRENGTH**

**HIGH FLEXURAL STRENGTH  
VIBRATION TOLERANT**

**SUITABLE FOR TONGUE &  
GROOVE FLOORS**

## **DESCRIPTION:**

SUPER-FLEX is a two-component grey cement-based, highly polymer modified, thin-bed ceramic tile adhesive, which conforms to BS 5980 Type 3 Class AA and BS EN 12004 Type C, Class 2F-S2. Suitable for fixing all types of ceramic floor tiles, including mosaics, porcelain and vitrified tiles in internal & external locations where slight surface movement or vibration is likely. SUPER-FLEX is ideal for application onto timber panels, plywood, composite boards as well as tongue and groove floorboards and floating plywood floors. SUPER-FLEXs' fast-setting properties give improved flexural strength and enhanced adhesion to non-porous surfaces such as mastic asphalt, steel / GRP decking, glazed and vinyl tiles.

## **SURFACE PREPARATION:**

All floor surfaces must be clean, firm and free of dust, dirt, oil, grease and loose flaking coatings. Timber surfaces must be structurally sound and braced securely enough to support the likely applied trafficking load without the risk of excessive deflection. Wood-based surfaces, plywood, panel-boards and tongue & groove floorboards should be dry, sealed on all exposed faces and edges and then primed using TILERS PRIMER SBR. Timber boarding should be waterproof rated, 15mm thick and be screw fixed at 150mm centres to provide a dimensionally stable background as described in BS 5385. All boards must be level, showing no edge protrusions and be fixed in place with a 0.5 to 1mm gap to avoid expansion stresses between the boards and around the wall perimeters.

## **MIX PREPARATION:**

SUPER-FLEX should be mixed with mechanical stirring to give a soft, slump-free, easily worked mortar. Care should be taken to ensure the full powder content is mixed into the complete volume of latex and when a consistent mix is achieved allow about 5 minutes for the paste to body up. SUPER-FLEX is always supplied as a two-component "bag and bottle" combination and the powder component should NEVER be mixed with water, but only the SUPER-FLEX LATEX, which is supplied together with the powder. Part-used adhesive should never be "freshened up" with additional measures of latex, but should always be discarded once it appears to lose its' workability. In ideal conditions (20°C), SUPER-FLEX will remain workable for 30 to 40 minutes and then reach final set after about 3 to 4 hours.

## **APPLICATION METHOD:**

For fixing ceramic tiles or mosaics, use a flooring grade broad notched trowel (10mm x 10mm notch at 16mm centres) to give a ribbed mortar bed on the substrate, into which the tiles are firmly bedded with a twist and slide action to ensure a full "solid-bed" contact is achieved, leaving no voids beneath the tiles. The position of the tiles can be adjusted up to 10 minutes after initial fixing. Open time of the exposed mortar bed is approximately 20 minutes, depending on surface porosity and site conditions. Do not trowel out an area of adhesive greater than can be tiled over within a 10 minute period. It is recommended that tiles with raised or studded back profiles, should be back-buttered immediately prior to fixing, to ensure solid-bed full contact with the surface adhesive bed. The final adhesive bed depth should be in the range of 2 to 4mm. Expansion joints should be planned and installed in large floor areas in accordance with the recommendations of BS 5385.

## **COVERAGE:**

When fixing on a level, even floor surface using a 10mm notched flooring trowel, SUPER-FLEX will cover at a rate of about 3 to 4kg per sq. metre for heavy-duty, studded tiles fixed in a solid bed of adhesive.

## **GROUTING:**

Grouting may proceed as soon as the tile bed is sufficiently firm, which for SUPER-FLEX will be after 3 - 4 hours at room temperature. This period however will be extended in cold conditions. For wall joints up to 4mm wide use PALACE WHITE WALL TILE GROUT, however on flooring applications, joints of up to 20mm wide can be grouted using WIDE JOINT FLOOR TILE GROUT. Where tiles have been fixed on timber surfaces or in locations subject to immersion or persistent wetting, the use of PALACE FLEXI-FLOOR TILE GROUT is recommended.

## **TECHNICAL SUMMARY:**

**MIX RATIO:**

**POT LIFE:**

**OPEN TIME:**

**FINAL SET:**

**COVERAGE:**

## PALACE CHEMICALS LTD

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### PRODUCT IDENTIFICATION:

## SUPER-FLEX POWDER

#### COMPOSITION:

A Portland Cement (CAS 65997-15-1) based blend of lime, calcium silicates, calcium aluminates, graded silica sands; spray dried copolymers; lightweight synthetic fillers; organic additives and super - plasticisers

#### HAZARDS CLASSIFICATION: IRRITANT

Contains CHROMIUM VI- May produce an allergic reaction  
**RISK OF SERIOUS DAMAGE TO EYES**

Contact with wet paste may cause dermatitis, irritation or burns

Wear suitable gloves, clothing and eye/face protection.

Avoid contact with skin and eyes.

Avoid breathing dust. Keep out of the reach of children

On contact with skin or eyes rinse immediately with plenty of water and seek immediate medical assistance after eye contact.

#### FIRST AID MEASURES:

##### INHALATION:

Avoid working in a poorly ventilated, confined space. Remove to fresh air and rest. If nose or airways become inflamed or breathing difficulties occur, seek medical attention.

##### SKIN CONTACT:

Wash off skin immediately with warm soapy water. Remove contaminated clothing and launder regularly. Where irritation to skin is apparent seek prompt medical attention.

##### INGESTION:

Clean out mouth with copious volumes of water and drink plenty. Do not induce vomiting. Seek medical attention if mouth is inflamed

##### EYE CONTACT:

An instant response is essential. Irrigate thoroughly for 15 minutes with clean running water or eye wash bottle. Seek medical attention if eye irritation becomes inflamed.

#### FIRE FIGHTING MEASURES:

##### NON FLAMMABLE

Recommended extinguishers – Dry powder; Foam, CO2 – sacks may support combustion product will not.

Hazardous decomposition when subject to combustion – N/A

Special procedures – N/A

#### ACCIDENTAL RELEASE MEASURES:

Recover spillages in a dry state wherever possible. Do not allow wet residues to harden. Confine all residues in a clearly marked sealed containers for disposal in accordance with Local Authority regulations for cement-based building products.

#### HANDLING & STORAGE:

Handling: Lifting operations must be no more than 1 x 25kg sack at a time by a competent operator wearing gloves.

Storage: Store in sealed, clearly marked sacks. Do not stack more than 4 high. Keep out of reach of children in a cool well-ventilated environment, preferably off the ground and out of contact with water

#### EXPOSURE CONTROL / PERSONAL PROTECTION:

OEL 8hr TWA = 10mg/M3 total inhalable dust - 4mg/M3 respirable dust.

##### Respiratory:

Good ventilation is always recommended along with a BS approved dust mask

##### Hand:

Wear 17" long elbow length heavy duty natural rubber gloves or gauntlets approved to EN 374 & EN 420 with a BTT rating of > 8 hrs for strong alkalis

##### Eye:

Dust proof BS 2092 Goggles or chemical grade visors are also advised wherever there is a risk of dust or paste entering the eyes.

##### Skin:

PVC overalls should be worn and laundered immediately after use. Do not work in powder or paste contaminated overalls

## SAFETY DATA SHEET No. 050 – issue date 16-06-03

### PRODUCT: SUPER-FLEX POWDER

#### PHYSICO-CHEMICAL PROPERTIES:

Appearance – Coarse grey powder  
Boiling point range – n/a  
Solubility – water dispersible  
Auto ignition temp – n/a  
Specific gravity - 1.05 dry - 2.15 wet  
Miscibility – water only  
Evaporation rate - N/A

Odour – N/A  
Vapour pressure – N/A  
Flash point - N/A  
Explosive properties - N/A  
Viscosity – > 50,000 Mpa.s when mixed.  
PH - 11.0 - 12.5  
Oxidising properties - N/A

#### STABILITY & REACTIVITY:

Conditions to avoid - n/a  
Materials to avoid – Strong acids  
Hazardous decomposition products - n/a

#### TOXICOLOGICAL INFORMATION:

Routes of exposure – Inhalation, skin contact, eye contact and ingestion.  
Key Health effect – Irritates skin and high alkalinity may damage internal mucous membranes if ingested.

Acute toxicity: severe eye irritant  
Corrosivity: Damages skin

Sensitisation: Contact & allergic dermatitis  
Mutagenicity: n/a

Carcinogenicity: n/a  
Reproductive toxicity: n/a

#### ECOLOGICAL INFORMATION:

Bio-accumulative potential – not expected to bio-accumulate.  
Ecotoxicity: strongly alkali – will adversely affect low volume watercourses  
Environmental Persistence – Not likely to remain strongly alkali in contact with water after hydration is complete.

#### DISPOSAL CONSIDERATIONS:

Dried powder, unused product and freshly contaminated application materials must be considered potentially irritant and disposed of in sealed bags in accordance with local authority regulations for building waste.

#### TRANSPORT INFORMATION:

Not classified for transport purposes

#### 15. REGULATORY INFORMATION:

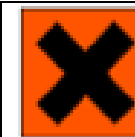
**CHIP Hazard symbols: Xi - IRRITANT –**

Contains CHROMIUM VI- May produce an allergic reaction

**R41 - RISK OF SERIOUS DAMAGE TO EYES**

Safety phrases: S2 – S24/25 – S36/37/39 - S64

**Other regulatory controls:** Health & Safety @ Work Act 1974;  
Control of Substances Hazardous to Health Regulations 1994.



**IRRITANT**

#### FURTHER INFORMATION:

The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work.

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### SUBSTANCE IDENTIFICATION:

#### **SUPER-FLEX LATEX TO MIX ONLY WITH SUPER-FLEX POWDER**

#### COMPOSITION;

An aqueous dispersion of a micro-particle sized copolymer of Styrene and acrylo-nitrile emulsion with trace levels of each monomer.

#### HAZARDS CLASSIFICATION:

NON-HAZARDOUS

Not subject to statutory hazard labelling in accordance with the CHIP regulations.

#### FIRST AID MEASURES:

INHALATION: