



# PALAFLEX ADHESION ENHANCING ADMIXTURE

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**IMPROVES BOTH FLEXURAL  
AND TENSILE STRENGTH**

**IMPROVES WATER  
RESISTANCE**

**SUITABLE FOR BOTH  
ADHESIVES AND GROUTS**

## **DESCRIPTION:**

PALAFLEX is an acrylic polymer dispersion based admixture suitable for addition to cement based adhesives and grouts. When used in combination with RAPID SET or ALL-WEATHER, the adhesive conforms to BS 5980 Type 3 Class AA (BS EN 12004 Type C, Class 2FT) and its use in grout will also demonstrate a commensurate improvement in movement tolerance and durability. The inclusion of PALAFLEX in place of water when using RAPID SET or ALL WEATHER makes both adhesives suitable for fixing all types of ceramic floor tiles, including mosaics, porcelain and vitrified tiles in locations where slight surface movement or vibration is likely. PALAFLEX is ideal for application onto timber panels, plywood, composite boards, which have been adequately screw fixed to a rigid fully braced structure. Mixing with PALAFLEX rather than water also improves the water-repellency of both the adhesive and WIDE JOINT FLOOR TILE GROUT. It is recommended when fixing in areas subject to total immersion or in external locations, where it will also inhibit surface efflorescence. The addition of PALAFLEX to standard floor tile adhesives, does not make them suitable for use on tongue and groove floorboards, or floating plywood floors, where the use of SUPER-FLEX adhesive is recommended.

## **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 PLASTERBOND 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. When using PALAFLEX to fix over impermeable or existing glazed surfaces, it will not be necessary to prime this type of surface.

## **MIX PREPARATION:**

PALAFLEX should be added to the mixing vessel and powder poured in with mechanical stirring to give a soft, slump-free, easily worked mortar. PALAFLEX is intended for use as a complete replacement for water when mixing with RAPID SET or ALL WEATHER at the rate of 5 litres of PALAFLEX per 20kg of powder. In ideal conditions (20°C), adhesives mixed with PALAFLEX will give the same pot-life and setting time as is normally achieved when mixing with water. When using PALAFLEX in WIDE JOINT FLOOR TILE GROUT, it can be diluted at up to 1 to 1 with water to retain the flow properties of the grout, however the mix ratio of "diluted admixture" to powder should still remain as 2.5 litres per 10kg.

## **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, 5 litres of PALAFLEX mixed with 20kg of powdered adhesive will cover about 5 square metres when applying heavy-duty, studded tiles in a solid bed of adhesive.

## **GROUTING:**

Grouting may proceed as soon as the tile bed is sufficiently firm. The use of a rubber edged squeegee or a firm, damp sponge is recommended to work the grout fully and evenly into the tile joints. When added to WIDE JOINT FLOOR TILE GROUT, PALAFLEX can be diluted at 1 to 1 with water, giving an equivalent inclusion rate of 2.5 litres of PALAFLEX per 20kg of WIDE JOINT FLOOR TILE GROUT.

For wall joints on surfaces where movement or vibration is likely, the flexural strength of WHITE WALL TILE GROUT can be improved when mixed with a 1 to 1 dilution of PALAFLEX, and then added to the powder at a ratio of 1 part admixture to two parts WHITE WALL TILE GROUT, giving an equivalent dosage level of 1.7 litres of PALAFLEX per 10kg. The inclusion of PALAFLEX in any type of GROUT requires prompt attention when cleaning off surface residues from the tile face, since if left unattended, PALAFLEX enhanced grouts can bond very firmly to glazed surfaces and be difficult to remove.

## **STORAGE & PACKAGING:**

PALAFLEX is supplied either as 5 litre, or 2.5 litre bottle of latex and has a storage life of not less than 12 months if stored in dry, un-opened conditions. Consult the PALAFLEX material safety data sheet for advice on handling and safety procedures.

The information provided by this Technical data sheet is given in good faith and is to the best of our current knowledge true and accurate. However it is given without guarantee, as conditions of use and workmanship involved are both beyond our control. All information supplied is subject to the company's terms and conditions of sale, copies of which are available on request.

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<b>SUBSTANCE IDENTIFICATION:</b>			
<b>PALAFLEX</b>			
<b>ADHESION ENHANCING ADMIXTURE FOR CEMENT BASED TILE ADHESIVES</b>			
<b>COMPOSITION:</b> An aqueous dispersion of a micro-particle sized copolymer of Styrene and acrylo-nitrile emulsion with trace levels of each monomer.		<b>HAZARDS CLASSIFICATION:</b> NON-HAZARDOUS Not subject to statutory hazard labelling in accordance with the CHIP regulations.	
<b>FIRST AID MEASURES:</b>			
<b>INHALATION:</b> If inhaled, clear out mouth with clean water and seek medical attention. If irritation or breathing difficulties persist, seek medical attention.	<b>SKIN CONTACT:</b> Wash off skin with clean running water. Remove and launder heavily soaked clothing which may be in contact with skin	<b>INGESTION:</b> Clean out mouth with copious volumes of water. Do not induce vomiting. Seek prompt medical attention and show this data sheet.	<b>EYE CONTACT:</b> Irrigate thoroughly for 15 minutes with clean running water or a boric saline eye wash bottle. Seek medical attention should eye irritation persist or become inflamed.
<b>FIRE FIGHTING MEASURES:</b> This product is a NON-FLAMMABLE polymer dispersion based building admixture. Outer packaging surrounding this product will combust at when exposed to flames			
<b>ACCIDENTAL RELEASE MEASURES:</b> Absorb large spillages on sand, sawdust or absorbent granules and confine residues in a clearly marked sealed container for disposal in accordance with Local Authority regulations for water based polymer dispersions. Keep away from drains and watercourses			
<b>HANDLING &amp; STORAGE:</b> Store in sealed, clearly marked containers. Keep out of reach of children in a cool well-ventilated and dry environment (Temps < 40°C).			
<b>EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENT:</b> <b>Occupational exposure limit:</b> for residual levels of 20 ppm Styrene free monomer.			
<b>Respiratory:</b> Good ventilation is always recommended when pouring and mixing this product. In confined spaces respiratory equipment with organic vapour filter is advised	<b>Hand:</b> 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 when working with cement pastes.	<b>Eye:</b> Splash proof BS 2092 Goggles are advised wherever there is a risk of liquid admixture or cement paste entering the eyes.	<b>Skin:</b> Wear a disposable plastic apron or overalls, which should be laundered after use if contaminated. Waterproof safety boots/shoes are also recommended

# SAFETY DATA SHEET No. 003

## PRODUCT: PALAFLEX

<b>PHYSICO-CHEMICAL PROPERTIES:</b>		
Appearance – Opaque white milky liquid. Miscibility – Water only Ph – 6.5 – 7.5. Density – 1.025 +/- 0.03 gms / litre Odour – slight ester type. Solubility – 100% in water	Flash point - n/a Boiling point - > 100°C Vapour pressure - 25 hPa Auto-ignition temperature - n/a Viscosity - 100 - 150 mPa.s Miscibility - 100% with water - none with in oils	
<b>STABILITY &amp; REACTIVITY:</b> Materials to avoid - Will react with concentrated acids and strong oxidising agents. Conditions to avoid - High temperatures No known hazardous decomposition products - dissolves to harmless soluble salts		
<b>TOXICOLOGICAL INFORMATION:</b> Non-toxic under normal condition of use.		
Acute toxicity: n/a Corrosivity: N/A	Sensitisation: n/a Mutagenicity: n/a	Carcinogenicity: n/a Reproductive toxicity: n/a
<b>ECOLOGICAL INFORMATION:</b> Persistence & degradability - no evidence of bio-accumulation Ecotoxicity – May harm aquatic life in confined low volume watercourses Bio-accumulative potential - All components are readily biodegradable.		
<b>DISPOSAL CONSIDERATIONS:</b> Dispose all volumes according to Local Authority regulations for aqueous, low hazard polymer dispersions. Coagulate polymer phase and dispose aqueous phase under a bio treatment regime		
<b>TRANSPORT INFORMATION:</b> Not subject to CPL / ADR restrictions		
<b>REGULATORY INFORMATION:</b> CHIP Hazard symbols: <b>NOT CLASSIFIED AS HAZARDOUS</b> as supplied. <b>NB. R36 / 38 - IRRITATING TO EYES AND SKIN</b> when used as an admixture with cement based mixtures - see relevant MSDS for adhesive - Safety phrases: S2 – S24/25 – S36/37/39 - S64 will apply. <b>Other regulatory controls:</b> Health & Safety @ Work Act 1974; Control of Substances Hazardous to Health Regulations 1994. Environmental Protection Act 1990.		
<b>FURTHER INFORMATION:</b> 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. This data sheet complies with EC Directive 91/155EC.		