



# RAPID SET CERAMIC TILE ADHESIVE

Issue date – RSTA-1/0202

**WALK ON 3 HOURS  
AFTER FIXING\***

**FAST-SETTING  
WATER-RESISTANT**

**HIGH EARLY  
STRENGTH**

## DESCRIPTION:

RAPID SET is a cement-based, thin-bed ceramic tile adhesive, which conforms to BS 5980 Type 2 Class AA (BS EN 12004 Type C, Class 1FT). Available in grey for fixing ceramic floor and wall tiles, mosaics, natural and lightweight pre-cast cladding brick slips. RAPID SET forms a strong bond with solid surfaces such as concrete, render, block-work and brickwork. For application to timber panels, composite boards and impermeable surfaces, the incorporation of PALAFLEX acrylic additive is strongly recommended. This will give improved flexural strength, water-resistance and is particularly recommended when fixing porcelain, marble or vitrified tiles. RAPID SET is fully water-resistant; frost resistant; suitable for interior / exterior use and locations which are subject to regular wetting, e.g. showers, wet rooms and bathrooms.

## SURFACE PREPARATION:

The substrate must be clean, firm and free of dust, dirt, oil, grease and loose flaking coatings. Surfaces must also be structurally sound and strong enough to support the traffic loading expected for the area concerned. RAPID SET can be applied to dry or damp surfaces, however moisture sensitive materials must be dry and remain dry after fixing. Worn or porous masonry surfaces should be sealed with TILERS PRIMER SBR diluted as 1 to 3 with water. Wood -based surfaces, plywood and panel-boards should be dry, sealed on all exposed faces and edges and primed using TILERS PRIMER SBR. They must always be rigidly braced to provide a dimensionally stable background as described in BS 5385. RAPID SET applied to timber surfaces must be mixed with PALAFLEX acrylic additive to ensure enhanced adhesion is achieved. Do not apply onto bare, un-sealed gypsum plaster or anhydrite floor screed before first priming this type surface with two coats of neat TILERS PRIMER.

## MIX PREPARATION:

RAPID SET should be added to water in a clean container whilst mechanically stirring and mixed thoroughly to give a soft, slump-free, easily worked mortar. The recommended mixing proportions by volume are 1 part water to 3 parts powder. The consistency of the paste can be adjusted with slight additions of water or powder at the initial mixing stage, however part-used adhesive should never be "freshened up" with later water additions, but should always be discarded once it appears to lose its workability. In ideal conditions (20°C room temperature), RAPID SET will remain workable for 30 to 40 minutes and then reach final set after about 2 to 3 hours. The mix will remain workable for 30 to 40 minutes and then reach final set after about 2 to 3 hours. The workable open time will however be shortened in higher temperatures and mix volumes should be reduced to work in smaller areas per batch. For applications onto timber plyboards, non-porous surfaces or using vitrified tiles, RAPID SET should be mixed with PALAFLEX at the rate of 5 litres of PALAFLEX per 20kg bag of RAPID SET.

## APPLICATION METHOD:

For fixing ceramic tiles or mosaics, use a notched trowel to give a ribbed mortar bed on the substrate, into which the tiles are firmly bedded with a twist and slide action to ensure full contact. Use a 3mm x 3mm notch at 6mm centres for mosaics and thin flat backed wall tiling, a 5mm x 5mm notch at 10mm centres for general wall tiling and 10mm x 10mm notch at 16mm centres for floor tiling. 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. It is recommended that tiles with raised or studded back profiles, (or in situations where dampness is likely after tiling), should be buttered to ensure solid bed fixing. Do not trowel out an area of adhesive greater than can be tiled over within a 10 minute period. Surfaces such as rutted concrete and masonry block-work, that are rough or uneven may first be levelled with PALACE SELF-LEVELLING COMPOUND and when sufficiently firm (24 – 48 hours later), is followed by an application of RAPID SET adhesive as a bed of 2 to 3mm thickness. 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 trowel, RAPID SET will cover at a rate of about 4kg per sq. mtr for heavy-duty, studded tiles. When applying wall tiles, the product will cover at about 3 kg per sq. mtr.

## GROUTING:

Grouting may proceed as soon as the tile bed is sufficiently firm, which for RAPID SET 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 PALACE FLOOR TILE GROUT.

## TECHNICAL SUMMARY:

MIX RATIO:	POT LIFE:	OPEN TIME:	FINAL SET:	COVERAGE:
3 powder to 1 water (vol:vol)	30 – 40 minutes	20 minutes	2 - 3 hours	3 – 4 kg/sq. metre

## STORAGE & PACKAGING:

RAPID SET is supplied in 5kg; 10kg and 20kg multi-ply, moisture resistant paper sacks and has a storage life of not less than 12 months if stored in dry, un-opened conditions. Consult the RAPID SET 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.

# PALACE CHEMICALS LTD

Speke Hall Industrial Estate; Speke; Liverpool L24 4AB

Tel; 0151 486 6101; Fax 0151 448 1982; e-mail [technical@palacechemicals.co.uk](mailto:technical@palacechemicals.co.uk)

## PRODUCT IDENTIFICATION:

### RAPID SET FLOOR TILE ADHESIVE

#### COMPOSITION:

A Portland Cement (CAS 65997-15-1) based blend of lime, calcium silicates, calcium aluminates, graded silica sands; spray dried copolymers; 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. 046 – issue date: 16-06-03

## PRODUCT: RAPID SET

### PHYSICO-CHEMICAL PROPERTIES:

Appearance – Coarse grey particulate powder  
Boiling point range – n/a  
Solubility – water dispersible  
Auto ignition temp – n/a  
Specific gravity - 1.35 dry - 2.25 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 – severe skin burns and destruction of internal mucous membranes

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

### 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.