



TECHNICAL DATA SHEET

MAY 2025 Ver 01 - PALGT 29.05.25



STANDARD SETTING GEL-TEC

FLEXIBLE HOMOGENOUS
WALL & FLOOR TILE ADHESIVE

- Suitable for ceramic, marble, stone, porcelain, mosaics, glass and large format tiles
- Contains 33% recycled raw materials
- Walk on & ready to grout in 24 hours
- Excellent initial grab & non-slip
- High yield thixotropic properties

DESCRIPTION

PALACE GEL-TEC is a standard setting, flexible & thixotropic, fibre reinforced cement-based tile adhesive, containing up to 33% recycled material, available in white. This product provides a high bond strength and instant grab required when fixing ceramic, marble, natural stone, mosaic, porcelain and large format tiles to walls & floors both internally and externally. With its enhanced performance, such as its longer working / open time and S1 deformation & thixotropic properties, making it easier for all types of tile application. **PALACE GEL-TEC** will fix tiles onto a wide range of suitably prepared substrates including tile backer boards and sub-floor heating systems, as well as bonding to impermeable surfaces such as existing tiles and power-floated concrete without the need to include a flexible additive in the mix.

Conforms to BS EN 12004 Type C2TE-S1

TECHNICAL DATA

| | |
|---------------------------|-----------------------|
| UNIT SIZE | 20kg |
| COLOUR | White |
| MAX BED DEPTH | Up to 16mm |
| TIME UNTIL READY TO GROUT | 24 hours* |
| WORKING POT LIFE | 3 - 4 hours* |
| INITIAL SET TIME | 16 - 24 hours @ 20°C* |
| APPLICATION TEMPERATURES | 5 - 25°C |

* Dependent on temperature, substrate and site conditions

EN ISO 45001



OHS 596309

EN ISO 14001



EMS 85788

EN ISO 9001



FM 01010

📍 Speke Hall Industrial Estate, Speke, Liverpool, L24 1YA
☎ +44 (0) 151 336 9104 @ sales@palacechemicals.co.uk
🌐 www.palacechemicals.co.uk
Registered No. 1377241 England



TECHNICAL DATA SHEET

MAY 2025 Ver 01 - PALGT 29.05.25

SURFACE PREPARATION

The substrate must be clean, firm and free of dust, dirt, oil, grease and loose flakey coatings. New or fresh concrete surfaces must be allowed at least 4 weeks to dry and cure, whereas older porous or worn concrete should be primed with **PALACE MULTI-PRIME** diluted 1:3 parts with water. It must also be structurally sound and strong enough to support the expected "in-service" loading. **PALACE GEL-TEC** can be applied to 15-18mm waterproof ply-board overlaid with tile backer boards, screw-fixed at 300mm centres and rigidly braced to provide a dimensionally stable background as described in the Code of Practice - BS 5385 parts 1 to 4.

Applications over sub-floor heating should allow 28 days before switching the heat on & only gradually raising the temperature day by day for the first week. **PALACE GEL-TEC** is not recommended for application directly onto tongue and groove timber floorboards or floating floors. Do not apply onto bare, un-sealed gypsum plaster or anhydrite floor screeds before removing dust & laitance and then sealing this type of surface with two coats of **PALACE MULTI-PRIME** the first diluted 1:1 with water and the second applied neat.

MIXING & APPLICATION

Always adding the powder to water, mechanically mix approximately 5.5 to 6.0 litres of clean water per 20kg to a smooth, lump-free consistency. Spread the adhesive using a suitable notched trowel for the application, depending on the tile size and substrate, fixing tiles firmly with a twist and slide action to a maximum bed depth of no more than 16mm in small areas (not exceeding 1m²) on floors. Fix full tiles, working away from the centre of the room and use tile spacers to ensure consistent joint width whilst periodically checking the laid tiles with a spirit level and wiping away any excess with a damp cloth. As temperatures and atmospheric conditions will cause the pot life / setting times to change (lower temperature = longer setting time), it is recommended to fix tiles before the adhesive forms a skin (typically 30 minutes). If the adhesive skins over, remove and apply fresh adhesive. Never add extra water to freshen up the mix. At ambient room temperature, the working life of the mixed adhesive will be up to 4 hours. The adhesive will reach initial set after 16 hours (depending on local temperatures) and can take light foot traffic for grout application to proceed after 16-24 hours.

COVERAGE

When fixing on a level, even floor surface using a flooring grade notched trowel, **PALACE GEL-TEC** will cover at a rate of about 4.0 kg per sq. mtr for heavy duty, studded floor tiles. When applying wall tiles, with a 6mm notched trowel a coverage rate of about 2.5 kg per sq. mtr will be achieved.

PRECAUTIONS

All tile fixing should be carried out in accordance with BS 5385 Parts 1 to 4 – The Code of practice for the installation of Ceramic & Stone wall & floor tiles. Do not allow adhesive residue to set & harden on the tile face. Do not mix or apply this adhesive when air or ground temperatures are

forecast to be below 5°C or greater than 35°C at any time during the first 24 hours after application

CUTTING & SHAPING TILES

Mark the front of the tile with a pencil and score the glazed face with a tile scribe or combination cutter, which can then be used to snap the tile. The cutting of large format wall or floor tiles should be carried out using a professional platform type mechanical cutter, preferably with a diamond tipped wet wheel cutting disc, especially when shaping natural stone. Shaping tiles to fit around curved units can be made easier by making a cardboard template of the area, or by using a profile gauge before cutting to the outline with either a tile-saw or a diamond tipped wheel cutter.

GROUTING

Grouting may proceed as soon as the tile bed is sufficiently firm, which for **PALACE GEL-TEC** will be after 16-24 hours at room temperature. This period however will be extended in cold conditions. When the adhesive is fully set, wall & floor joints can be grouted using **PALACE COLOUR-LOCK GROUT** or **PALACE ANTI-MOULD GROUT**, however on wider flooring applications, joints of up to 20mm wide can be grouted using **PALACE WIDE-JOINT FLEXI FLOOR TILE GROUT**.

STORAGE

Keep the product sealed until use in dry, well ventilated conditions at an ambient temperature and away from all sources of damp. When kept in its original sealed state in a permanently dry environment, this product will retain a shelf life of up to 12 months from date of manufacture. Should further technical information be required, contact the Palace Technical helpline on 0151 486 6101.

WALL TILES SUBSTRATE LOAD LIMITS

Wall substrates should be strong enough to support the weight of the ceramic tile or natural stone to be installed & weight of the associated adhesive bed. Maximum weight restrictions for wall substrates:

| | |
|---|----------------------|
| Gypsum plaster | 20kg/m ² |
| Gypsum plasterboard (12.5mm) | 32kg/m ² |
| Cement / sand rendering & concrete | No limit |
| Lightweight foam-cored tile backer boards | 60kg/m ² |
| Glass reinforced cement-based boards | 50kg/m ² |
| Gypsum fibreboards | 40kg/m ² |
| Other rigid tile backer boards | Consult manufacturer |

EN ISO 45001



OHS 596309

EN ISO 14001



EMS 85788

EN ISO 9001



FM 01010

📍 Speke Hall Industrial Estate, Speke, Liverpool, L24 1YA
☎ +44 (0) 151 336 9104 @ sales@palacechemicals.co.uk
🌐 www.palacechemicals.co.uk
Registered No. 1377241 England



TECHNICAL DATA SHEET

MAY 2025 Ver 01 - PALGT 29.05.25

HEALTH & SAFETY



DANGER Contains Portland Cement

**Causes Serious Eye Damage. Causes Skin Irritation.
May Cause Respiratory Irritation.**

Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection or face protection (mask). Use only outdoors or in a well ventilated area. IF IN EYES: rinse cautiously with water for several minutes, remove contact lenses, continue rinsing and immediately call for medical assistance. IF ON SKIN: Wash with plenty of water and soap. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs seek medical attention. If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, call for medical assistance.

Always ensure that appropriate PPE & overalls are worn when applying this product. Wash hands after use and launder stained clothing. A complete PALACE material safety data sheet is available on request or online at www.palacechemicals.co.uk

TECHNICAL ADVICE

For advice on tile installation products call the Palace Chemicals Technical Helpline on 0151 336 9104.

APPROVED RECEIVING SURFACES

Concrete
Sand / cement screed
Tile backer boards
Cement faced fibre boards
Plasterboard
Sand / cement render
Concrete brick / block

Anhydrite / gypsum based screeds
Pre-seal with a 2 coat primer treatment

Tile on tile
Must be securely fixed

Firm & stable plaster
Seal with Multi-Prime

QUALITY & ENVIRONMENT

All Palace Chemicals products are manufactured under a BSI accredited ISO 9001:2015 Quality Management System, along with an ISO 14001 Environmental Management system continually working to reduce our carbon footprint.

DISCLAIMER

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. Our products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or control over where and how our products are stored and used. All products are sold and guaranteed subject to our terms and conditions of sale, copies of which may be obtained on request.

CLASSIFICATION

| | | |
|--|--------|-------------------------|
| UK CA | C E | UK NI |
| 1289 - 21 | | |
| Palace Chemicals Ltd, Speke Hall Industrial Estate, Speke, Liverpool L24 1YA | | |
| DoP - 83-60 | | |
| EN 12004 : 2007 + A1 2012 - C2TE-S1 Improved deformable standard setting cementitious adhesive with reduced slip and extended open time for internal & external tiling | | |
| Release of dangerous substrates | | See MSDS |
| Bond strength: | | |
| - Initial tensile strength | | ≥ 1.0 N/mm ² |
| Durability for: | | |
| - Tensile adhesion strength after 30 minutes open time | | ≥ 0.5 N/mm ² |
| - Tensile adhesion strength after heat ageing | | ≥ 1.0 N/mm ² |
| - Tensile adhesion strength after freeze thaw cycles | | ≥ 1.0 N/mm ² |
| - Tensile strength after water immersion | | ≥ 1.0 N/mm ² |
| Special Characteristics: | | |
| - Reduced slip | | ≤ 0.5mm |
| - Deformation | | ≥ 2.5mm |
| Reaction to fire | | Class E |



Speke Hall Industrial Estate, Speke, Liverpool, L24 1YA
+44 (0) 151 336 9104 @ sales@palacechemicals.co.uk
www.palacechemicals.co.uk
Registered No. 1377241 England