

# **TA C-4 Premium**

High performace polymer Modified Non Slip Adhesive

Pack Size 25Kgs, 20Kgs

## TDS Technical Data Sheet

#### Description

TA C 4 Premium is a high polymer-modified, grey-colored adhesive formulated to provide enhanced slip resistance, flexibility, and extended open time, making it ideal for fixing large format tiles, slim tiles, and natural stones, including engineered stones. It is fiber-reinforced to increase flexural and bond strength, as well as to impede crack propagation in the composite material. This adhesive is suitable for wall and floor applications in both interior and exterior environments, with a bed thickness of up to 15 mm, making it perfect for tiling on uneven substrates.

#### Features

Fiber-reinforced for high performance and strength Deformable: accommodates differential movement of the substrates and covering Good slip resistance required for fixing large format wall tiles Extended open time Bed thickness up to 15 mm: suitable for tiling on uneven substrates Use of cretebond latex with TA C 4 Premium will improve deformability to comply with IS Standard 4TS2 and EN Standard C2TES2 Excellent bond to various building materials Excellent water and frost resistance Excellent tensile & shear adhesion Easy mixing, smooth application & good workability

## Suitable Background/Bases

Cementitious floor screed Cement & lime renders Pre-fabricated concrete walls Existing tiled surfaces (ensure the surface is abraded and cleaned before installation) Areas subjected to heavy foot traffic Fibre cement boards, Type H or MR grade plaster/gypsum boards

#### Physical Properties @27±2°C

Bed Thickness:	2 - 15 mm
Pot Life:	3 hours
Setting Time:	24 hours
Temperature Resistance:	-30°C to 150°C
VOC Content:	1.90 g/L

### Properties as per IS 15477:2019@27 ± 2°C

Tensile Adhesion Strength (as per Annex A)	Dry Condition: > 1.6 N/mm²
Tensile Adriesion Strength (as per Annex A)	Wet Condition: > 1.20 N/mm <sup>2</sup>



## **TA C-4 Premium-TDS**

Shear Adhesion Strength (as per Annex B)	Dry Condition: > 1.55 N/mm²     Heat Aging Condition: > 1.30 N/mm²     Wet Condition: > 1.15 N/mm²
Open time (as per Annex C)	: 35 mins
Adjustment time (as per Annex D):	30 mins
Slip (as per Annex E)	: 0.20 mm
Deformability (as per Annex F)	: 2.70 mm (for S1)

### Properties as per EN 12004: 2017 @ 23 ± 2°C

Froperties as per Livi 12004. 2017 (w 25 ± 2 °C		
Tensile Adhesion Strength (Clause 8.3)	<ul> <li>Initial: &gt; 1.6 N/mm²</li> <li>After water immersion: &gt; 1.25 N/mm²</li> <li>After heat aging: &gt; 1.30 N/mm²</li> <li>After freeze-thaw cycles: &gt; 1.25 N/mm²</li> </ul>	
Open time @ 20 mins	: > 0.80 N/mm²	
Slip (T) (Clause 8.2)	: 0.20 mm	
Transverse Deformation (clause 8.6):	2.70 mm (for S1)	
Coverage Estimates Approx. 1.10 - 1.20 kg/m²/mm		

## Square Notch Trowel Size & Consumption/m<sup>2</sup> (at 45° angle of trowel)

4mm x 4mm: 1.5 - 1.55 kg 6mm x 6mm: 2.30 - 2.40 kg 8mm x 8mm: 3.00 - 3.15 kg 12mm x 12mm: 4.5 - 4.7 kg 20mm x 20mm: 7.55 - 7.85 kg

**Note:** Coverage will depend on the nature and flatness of the surface and the method of application. For good coverage, it is vital that all surfaces are smooth, plumb, level, and free from defects and undulations.

#### Application Instructions

#### Substrate Preparation

Before starting any work, ensure that the base is sufficiently flat to permit the specified flatness of finished tiling, bearing in mind the permissible thickness of the adhesive. Surfaces to be tiled must be dry, clean, and free from loose material and contamination

#### Site Work Instructions

#### **Surface Considerations**

- New Concrete: Allow walls to air dry for at least 6 weeks before rendering/plastering/tiling.
- · New Cement/Sand Rendering: Allow plastered surfaces to air dry for at least 2 weeks (3 weeks for swimming pools) before tiling.
- Existing Concrete/Screed Bases: Cut out all loose or hollow portions and make good with a 1:3 cement sand mortar applied over a slurry bonding coat and dry and cure for 7 days.
- Ceramic/Vitrified & Fully Vitrified Tile/Terrazzo/Hard Natural Stone Bases: Ensure the existing finish is firmly adhering to the base. Remove any loose or hollow sounding tiles and reprofile with a 1:3 cement sand mortar over a slurry bonding coat.
- · Fibre Cement Boards/Tile Backer Boards: Ensure that boards are dry, securely fixed, rigid, and fixings do not protrude.
- · Overlaid Timber Floors: Ensure boards are rigid and stable to receive tiles, with adequate ventilation beneath.
- MDF (Internal Dry Areas Only)/Plywood/Chip Board: Ensure sheets are dry, securely fixed, rigid, and that fixings do not protrude.

#### Mixina

Add TA C 4 Premium to clean water. Mix thoroughly until a lump-free mortar is obtained. A 20 kg bag will require approx. 5.60 - 6.00 litres of water to obtain a slump-free consistency. The adhesive is immediately ready for use and has a pot life of approx. 5 hours. No further water should be

added. Where mixing by weight is not possible, volume mixing can be carried out at the site in the ratio of approx. 1:2.25 (water: powder).

#### **Application**

- 1. Spread the mixed adhesive on the prepared surface with a trowel, then comb through with a suitably sized square-toothed notched trowel
- 2. Fix the tiles within the open time of the adhesive, pressing them into place with a twisting and sliding action.
- 3. Check periodically that good contact is maintained with the back of each tile.
- 4. Leave adequate joints between individual wall and floor tiles unless self-spacing tiles are used.
- 5. Clean off surplus adhesive from the tile face and between joints.

**Note**: Do not use in damp conditions or at temperatures below 5°C. For large span tiling works, leave movement joints at every 3m interval and fill with a flexible sealant as per BS 5385. Prevent foot traffic until the adhesive has completely set.



## **TA C-4 Premium-TDS**

#### **Spacers**

Use spacers (minimum 2mm) for uniform joint width.

### Grouting

Grouting should be carried out after 24 hours using appropriate cementitious or epoxy grouts.

#### Cleaning

Tools and containers may be cleaned using clean water when the adhesive is still fresh. Hardened adhesive can be removed mechanically.

#### Storage and Shelf Life

TA C 4 Premium has a shelf life of 12 months when stored in normal dry conditions.

#### **Precautions**

Keep out of reach of children. Wear suitable protective clothing, gloves, and eye/face protection. After contact with skin, wash immediately with plenty of clean water. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice.

#### Pack Size

25Kgs, 20Kgs





#### **Data Reliability**

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

#### **Regional Compliance**

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

#### **Legal Disclaimer**

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