

Technical Data Sheet (TDS)

# StoneBird Chemicals Technical Data Sheet (TDS)

Product Name: Tile Bond

**Product Type:** Cementitious Tile Adhesive & Bonding Compound

**Application:** Used for fixing ceramic tiles, marble, and stone on walls and floors

in residential, commercial, and industrial projects.

#### **Product Overview**

StoneBird Chemicals Tile Bond is a high-performance cement-based adhesive formulated for superior bonding strength, workability, and long-term durability.

It ensures strong adhesion between tiles and substrates such as concrete, plaster, or masonry surfaces delivering high shear and compressive strength as validated by certified laboratory testing.

#### **Composition**

Modified cementitious blend containing graded aggregates, polymer additives and performanceenhancing chemicals to improve adhesion and flexibility.

## Physical Properties

Property	Specifications
Appearance	Grey Powder
Density	Approx. 1.5 g/cm <sup>3</sup>
Mixing Ratio	4.5 – 5.5 L of clean water per 20 kg bag
Pot Life	3–4 hours
Open Time	15–20 minutes
Adjustability Time	Up to 10 minutes
Compressive Strength	1534 psi
Shear Strength	1067 psi
Pull Off Adhesion	1.12 N/mm <sup>2</sup>

#### Surface Preparation

- Ensure surfaces are clean, level and free of dust, grease or loose material.
- Remove oil, wax, and curing agents before application.
- Dampen porous surfaces with clean water (avoid standing water).

#### Mixing Instructions

- Pour clean water into a mixing container.
- Gradually add **StoneBird Tile Bond powder** while stirring continuously.
- Use a **low-speed electric mixer** until a smooth, lump-free paste is achieved.
- Allow the mixture to rest for 5 minutes before application.

## Application Method

- Apply adhesive on the substrate using a **notched trowel**.
- Spread only as much area as can be tiled within the open time.
- Press tiles firmly into the adhesive bed, ensuring full contact.
- Adjust tile position within 10 minutes after placement.

#### Coverage

### Approx. 4-5 m² per 20 kg bag, depending on:

- Surface roughness
- Tile size and thickness
- Trowel notch depth

## Curing & Setting Time

• Initial Setting:

24 hours

• Full Cure:

7 days under normal conditions (25°C  $\pm$  2°C, 50% RH)

• Grouting:

After 24 hours

• Heavy Traffic:

After 48 hours

## Shelf Life & Storage

• Shelf Life:

12 months from the date of manufacture.

• Storage:

Keep in a cool, dry area away from moisture and direct sunlight.

• Store bags on pallets (not directly on the floor).

#### Standards & Compliance

- ASTM D-7234 / EN 12004 Adhesion Strength
- AASHTO T 193
  Shear Strength
- **BS 1881 Part-4** Compressive Strength

### Disclaimer & Certification Reference

The information in this document is based on laboratory tests and field performance data. Actual results may vary depending on application and conditions of use. StoneBird Chemicals assumes no responsibility for outcomes beyond its control.

Test Results Verified By:

Building Standards Laboratory (PEC Consult/1433)

ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018 Certified

