## **TECHNICAL DATA SHEET**

SILVER

C1TE (TYPE 1)



Mapisa369 Silver is a high-performance, polymer-modified cement-based tile adhesive classified under C1TE, Type 1, conforming to international standards for slip resistance and extended open time. Ideal for internal and external applications on floors and walls.

#### **CHARACTERISTICS**

- Classification: C1TE (EN 12004) / Type 1
- Form: Powder
- Color: Grey
- Consistency: Smooth, non-sag paste when mixed
- Slip Resistance: ≤0.5 mm
- Ready for Grouting: After 24 hours
- Extended Open Time

- Coverage: Approx 50-60 sq. ft. per 20 kg Bag @3mm thickness when using thin trowel.
- -Approx 25-30 sq. ft. per 20 kg Bag @6mm thickness when using thin trowel.
- Water Resistant: Yes
- Temperature Resistance: -20°C to +80°C (after curing)

MAPISA

• Adhesion Strength:  $\geq 0.5 \text{ N/mm}^2$  (standard)

#### **SCOPE OF USE**

- Suitable for ceramic, vitrified, and mosaic tiles
  - Internal area for wall and floor tiling
  - Residential and commercial spaces
  - Can be used in wet areas (bathrooms, kitchens)
  - · Ideal for concrete, cement screed, plastered, or brickwork substrates

#### SUBSTRATE PREPARATION

- Surfaces must be clean, dry, sound, and free from dust, oil, grease, and loose particles.
- Ensure substrate is fully cured (minimum 28 days for concrete).
- Level uneven surfaces before application.
- For highly absorbent surfaces, pre-wet or apply a suitable primer.
- Do not apply on metal, wood, gypsum boards (without primer), or painted surfaces without proper surface preparation.

## **APPLICATION**

- Mixing Ratio: Approx 5 7 liters of water per 20 kg of powder.
- Mix using a low-speed mechanical mixer until a lump-free, smooth paste is formed.
- Allow to stand for 5 minutes, then remix before application.
- Apply adhesive using a notched trowel appropriate for tile size.
- Place tiles within the open time and press firmly to ensure full contact.
- Adjust tiles within 20–30 minutes.
- Remove excess adhesive with a damp sponge before it hardens.

#### <u>GENERAL DATA</u>

- Appearance: Grey Packaging: 20 kg and 40 kg (for Project Sale Only)
- Shelf Life: 12 months in original packaging
- Storage: Store in a dry, cool area away from direct sunlight and moisture
- Health & Safety: Cement-based use gloves, mask, and goggles. Take Preventive measures.







2. Adhesive Application



3. Tile Fixing



4. Adjustment Time

# PERFORMANCE PROPERTIES AS PER ISO 13007 / EN 12004

Test Properties	Requirements	MAPISA Test Results
Open Time	Min. 30 minutes	20- 30 min
Adjustability	25 min Approx	25 min
Pot Life	120 min	120 min
Tensile adhesion at dry condition, after 28 days	≥0.5 N/mm <sup>2</sup>	≥0.90 N/mm <sup>2</sup>
Shear Adhesion at Dry Condition	≥1.0 N/mm <sup>2</sup>	≥1.25 N/mm <sup>2</sup>
Slip resistance	≤0.5 mm	0.31 mm



# PERFORMANCE PROPERTIES AS PER IS 15477: 2019

Testing Properties	Requirements	MAPISA Test Results
Tensile Adhesion - Dry Conditions (28 Days)	≥0.5 N/mm <sup>2</sup>	0.75 to 1.00 N/mm <sup>2</sup>
Tensile Adhesion - Wet Conditions	≥0.5 N/mm <sup>2</sup>	1.0 to 1.25 N/mm <sup>2</sup>
Shear Adhesion - Dry	≥0.5 N/mm <sup>2</sup>	1.0 to 1.25 N/mm <sup>2</sup>
Shear Adhesion - Heat Ageing	≥0.5 N/mm <sup>2</sup>	0.75 to 1.00 N/mm <sup>2</sup>
Shear Adhesion - Wet	≥0.5 N/mm <sup>2</sup>	0.75 to 1.00 N/mm <sup>2</sup>
Slip Resistance	≤0.5 mm	0.3 – 0.4 mm

# MOST IMPORTANT INSTRUCTION TO FIX GRANITE, HARD STONE, ELEVATION STONE ETC...

## For fixing Tiles Granite and Hard stone & other consider strictly below steps:

- 1. Surface preparation: Scrub or roughen the back side with a grinder to enhance bonding.
- **2.** Primer application: Use a suitable primer like Mapisa 369 TKD (Back Tile Primer) or equivalent to improve adhesion.

**3.** Mechanical fixation: For installations above 10 feet in height (inside or outside), use fasteners to ensure stability and safety.

- 4. Ensure the substrate is clean, dry, and stable.
- 5. Choose the right adhesive and follow manufacturer instructions.
- 6. Consider consulting a professional for complex or high-risk installations.







7. The substrate must be level, cured, undamaged, compact, rigid, resistant, dry and free from any debonding agents and from damp rising. All surfaces must be plumb and true to within 6 mm in 10 ft (3m). Dry, dusty surfaces should be dampened with water & excess water should be swept off. New concrete slabs shall be damp cured and 28 days old before application which will reduce the shrinkage from tile fixing surface. Expansion joints to be provided & filled with suitable sealant. Do not cover expansion joints with thin set tile adhesive/ tile.

**8.** Add 2.5 - 3 parts of powder to 1 part of water or 5 - 7 litre water for 20 Kg powder in a clean mixing vessel. Adjust the water as per desired consistency. Mix with a suitable mechanical stirrer or slow speed drills (50 - 100 rpm) until a lump free homogeneous paste is obtained. Always mix required quantity, which can be consumed within pot life. Leave mixture for 5 minutes before use. No further water should be added. Apply adhesive to the substrate with the flat side of the Trowel.

**9.** Comb on additional adhesive with the notched side. Use the proper sized notched trowel to ensure full bedding of the tile. Tiles must be fixed within 30 minutes of adhesive being applied, depending on the porosity of the surface and atmospheric conditions.

**10.** Check the adhesive ribs periodically and if a skin has formed, remove the dried adhesive and apply fresh adhesive. Press the tiles firmly into position with a slight twisting action, checking periodically that good contact is maintained with the back of each tile and beat in using rubber mallet to imbed tile and adjust level. Leave no voids behind tiles.For large size tiles or irregular surfaces, adhesive can additionally be buttered on the backs of the tiles to ensure full adhesive contact. Use suitable support along with adhesive for fixing tiles on vertical surfaces.



11. For highly absorbent natural stones which may form a wet patch when adhesive is used, it is recommended to use suitable. Impregnating sealer on all sides. Please refer Technical Data Sheets of product intended for use for specific instructions of use For highly absorbent surfaces like drywalls or consult with our technical team. Leave adequate joints between individual wall and floor tiles using spacers. The joint width shall be as per the recommendation of architect / engineer.

**12.** Clean off surplus adhesive from the tile face and between joints. Clean tools and tile work with water while adhesive is fresh.

MAPIS/