

TECHNICAL DATA SHEET (TDS)

CLEAR SEAL

Transparent Stone Adhesive & Filler

1. CHARACTERISTICS

CLEAR SEAL is a two-component transparent liquid polyester-based adhesive and filler formulated with unsaturated polyester resin dissolved in styrene and selected mineral fillers. It is designed for bonding, filling and repair applications in natural and artificial stone processing. Its liquid consistency provides excellent flow and spreading, making it particularly suitable for filling larger areas and cavities while maintaining good adhesion and easy post-curing processing.

2. FIELD OF APPLICATION

CLEAR SEAL is mainly used in the stone processing and fabrication industry for bonding, filling and repairing natural and artificial stones.

3. INSTRUCTIONS FOR USE

SURFACE PREPARATION

- Ensure the surface is clean, dry, sound and lightly abraded.
- Remove dust, grease, loose particles and other contaminants.
- Ensure the bonding surface is free from moisture.
- Suitable polyester colour pastes may be added up to a maximum of 5% when colour adjustment is required.

MIXING

- Add 1–4 g of liquid hardener to 100 g of CLEAR SEAL.
- Mix both components thoroughly until a smooth and homogeneous mixture is obtained.
- Prepare only the quantity that can be applied within the available working time.
- Do not add water or other materials to the mixture.

APPLICATION

- Apply CLEAR SEAL using a suitable spatula, spreader or filling tool.
- Take advantage of its liquid consistency for easy spreading and cavity filling.
- Keep bonding layers as thin as practically possible.
- For deeper repairs or larger cavities, apply in suitable layers.
- Allow sufficient curing before grinding, milling, drilling or polishing.
- Curing is accelerated by heat and delayed by cold.
- Clean tools immediately after use with a suitable cleaner before the material hardens.

4. SPECIAL HINTS

- Wear suitable protective gloves during handling and application.
- Hardener dosage above 4% may reduce adhesion and adversely affect surface drying.
- Hardener dosage below 1%, particularly below 5°C, may considerably delay curing.
- Keep bonding layers as thin as practically possible, preferably below 2 mm, to minimize shrinkage.
- Curing may cause approximately 2–8% shrinkage due to the resin reaction and heat development.
- When filling larger holes, cavities, corners and edges, use the minimum practical amount of hardener.
- Bonding exposed frequently to humidity, moisture or frost may have limited long-term durability.
- Slight yellowing may occur during prolonged outdoor exposure.
- Adhesion may be moderate on fresh, alkaline substrates such as concrete and concrete bricks.
- Once fully cured, CLEAR SEAL cannot normally be removed using conventional solvents. Removal is primarily mechanical or by high-temperature treatment above approximately 200°C.
- When properly handled and fully cured, the product is generally safe under normal intended use.

5. TECHNICAL INFORMATION

DENSITY

CLEAR SEAL : 1.10–1.15 g/cc

WORKING TIME AT 20°C

1% Hardener	: 12–16 min
2% Hardener	: 10–14 min
3% Hardener	: 5–8 min
4% Hardener	: 3–5 min

6. MECHANICAL PROPERTIES

Tensile Strength	: 55–65 Mpa
Bending Strength	: 75–85 Mpa

7. SHELF LIFE

Approximately 1 year in tightly sealed packaging, protected from frost.

Manufactured For & Marketed By:

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