



## DESCRIPTION

It is a cement-based, single-component, polymer and fiber added, R4 class, thixotropic, structural repair mortar formulated for application to mineral surfaces. Thanks to its special formulation, it provides excellent adhesion to surfaces. It can be used in the repair of all kinds of reinforced concrete structures on interior and exterior surfaces, in the repair of reinforced concrete structures that require resistance to chlorine and sulfate, at the joints of main structural elements, in crack, hole and surface leveling processes. It can be used in the repair of reinforced concrete surfaces remaining under soil and water, in the construction of fillets before waterproofing applications and in the preparation of surface leveling, and in the repair and leveling of high-strength concrete elements .It can be applied in thick layers in reinforced concrete structures to fill the tension rod (tie rod holes) gaps, in the repair of structures that require protection against sea water; Single application can be made between 5 – 40 mm. It does not crack in thick applications. It is thixotropic; It does not sag in overhead applications. It is resistant to chlorine and sulfate. It is not corrosive and poisonous.

| PRODUCT FEATURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | AREAS OF USE                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <ul style="list-style-type: none"> <li>Freeze resistant</li> <li>Excellent adhesion strength</li> <li>Excellent crack resistance</li> <li>Excellent shrinkage resistance</li> <li>Excellent Chlorine and Sulfate resistance</li> <li>Thixotropic property</li> <li>Anti-corrosive effect</li> <li>Not affected by ambient humidity</li> <li>Full drying within 24 hours</li> <li>55 N/mm<sup>2</sup> Compressive Strength</li> <li>Ability to be applied in layers</li> <li>No sagging in overhead applications</li> </ul> | <p>It is suitable for use on the following properly prepared surfaces:</p> <ul style="list-style-type: none"> <li>On Mineral Based Surfaces</li> <li>On interior and exterior surfaces, in tie rod holes</li> <li>In areas requiring chlorine and sulfate resistance</li> <li>In the repair of prefabricated elements</li> </ul> <p>ready to use! follow the application instructions during product application! consult us for all other application surfaces</p> |

## PACKAGING DETAILS

- Bag 25.00 kg kraft bag
- Pallet 105x105 cm: 64 bags, 1600 kg

## CLEANING INSTRUCTIONS

- Small spills: clean immediately with water before mortar hardens; clean tools with water.
- Serious spills: contain and remove with inert absorbent.
- Dispose of contaminated/unusable contents according to local/regional regulations.

## TECHNICAL INFORMATION

| Property                             | Value                                                                 |
|--------------------------------------|-----------------------------------------------------------------------|
| Related Standard                     | EN 1504-3                                                             |
| Product Class                        | R4                                                                    |
| Document Number                      | 007446-TSE-06/03                                                      |
| Product System                       | CC Type Repair Mortar Application: Pr:3, PR: 3.1 (Manual Application) |
| Reaction to Fire                     | A1 (Non-flammable)                                                    |
| Water/Cement Ratio                   | 15 – 18%                                                              |
| Usage Time (Pot-Life)                | 40 – 60 minutes                                                       |
| Time to Open to Pedestrian Traffic   | 24 hours                                                              |
| Ministry of Public Works Position No | 04.613/3b                                                             |
| Color                                | Gray                                                                  |
| D max                                | 2.0 mm                                                                |
| Flexural Strength                    | $\geq 7.0 \text{ N/mm}^2$                                             |
| Compressive Strength                 | $\geq 55.0 \text{ N/mm}^2$                                            |
| Adhesion Strength                    | $\geq 2.0 \text{ N/mm}^2$                                             |
| Density                              | $1.90 - 2.10 \text{ kg/dm}^3$                                         |
| Application Thickness                | 5.0 – 40.0 mm                                                         |
| Water Absorption                     | $\leq 0.5 \text{ kg/m}^2 \cdot \text{h}$                              |

- Cured at  $50 \pm 5\%$  relative humidity for 28 days.

## SURFACE PREPARATION

All surfaces to be applied must be clean, dry, sound and free of dirt, grease, oils, waxes, mold and other contaminants. Loose lime, chalked, cracked or peeled coatings must be removed by hand or power tools (scraping, abrasive wire brushing, pressure washing, sandblasting). Surface must be dust-free by aspiration or sweeping. Remaining dust reduces adhesion. Absorbent surfaces should be moistened with water, without leaving ponding. When adhesion primer is required, Kar Latex should be applied with a brush; Kar Repair PL-80 T applied on top before it dries. Crack areas should be supported with chamfer tape and ground mesh 10 cm wide at  $45^\circ$  to corner points. Application surface must be cured and sound. Surface should be wet with water at least 30 min before application, without ponding.

## APPLICATION NOTES

Surfaces should be moistened 12 – 24 hours after application; first moistening immediately, second after 24 hours. Surface should be moistened for 2 – 3 days; more moistening increases performance. Wear suitable work clothes, glasses, and masks during application. Do not apply to frozen, melting, or surfaces at risk of freezing within 24 hours. Avoid direct sunlight, strong wind, or hot surfaces; cover surroundings and roof; close doors/windows; allow only healthy airflow. Ambient temperature during application: +5°C – +30°C. Dilatation joints must be observed. Use profile suitable for final coating thickness. Underfloor heating: continuous operating temperature must not exceed 55°C. Determine leveling requirements before application. Material sets quickly at high temperatures. Powder must only be mixed with water in specified proportions; no foreign materials added. Cannot be applied on continuously wet floors or unstable/loose surfaces. Detailed product analysis available upon request.

## PRODUCT LIMITATIONS

- No acid resistance.
- Not for areas exposed to intense heat.
- Do not add more water than recommended.
- Do not apply below minimum allowed temperature; low temps slow setting, high temps accelerate.
- Workability varies with temperature.
- Not subject to ADR.
- Service Temperature: -30°C – +80°C
- Application Temperature: +5°C – +35°C

## CONSUMPTION – SHELF LIFE – STORAGE

- Store in original packaging in dry environment +5°C – +35°C.
- **Shelf life:** 12 months unopened; tightly closed package when not in use.
- Consume within 1 week after opening.
- **Max stacking:** 10 layers.

### Shelf Life:

3.5 – 4.5 kg/m<sup>2</sup> of powder for 2 mm layer, depending on surface condition and method.

## SAFETY & PRECAUTIONS

Avoid prolonged skin contact, inhalation of dust, vapor, spray. Causes eye irritation. Use adequate ventilation and fresh air in take. If watery eyes, headache, dizziness, or air monitoring shows high vapor/mist, use CE-approved respirator. Follow respirator instructions. Avoid contact with eyes, skin, clothing. Use chemical safety goggles. Wash hands thoroughly after handling; close container after use.

## FIRST AID

- **Skin:** wash with warm soapy water.
- **Eyes:** flush with water 15 min, seek medical attention.
- **Difficulty breathing:** leave area, seek medical help if persists.
- **Swallowing:** do not induce vomiting, seek medical attention.

## WARRANTY & DISCLAIMER

Based on scientific/practical knowledge. KARADENİZ MADENCİLİK SAN. VE TİC. A.Ş. is responsible only for product quality. Not responsible for consequences from incorrect use or uses outside written recommendations. Seller not liable for direct/indirect/incidental/special damages. Valid until a new TDS is issued.

