

**Floor Systems / Cement Based Surface Hardeners****MONOFIX® 100**

Quartz Aggregated Surface Hardener

**DESCRIPTION**

Abrasion resistant **powder surface hardener** consisting of a mixture of special type cement, high quality **quartz** aggregate and performance-enhancing chemical additives, applied monolithically on fresh concrete surfaces. It provides wear, impact, dust and abrasion resistance against **light** and **medium** loads on concrete surfaces.

**APPLICATION AREAS**

- Indoor and outdoor
- Factories, business centers
- Garages, parking lots and basement floors
- Hangars and mechanical workshops
- Loading and unloading areas
- Subway stations and underground passages
- Parks and gardens, pedestrian ways and pavements.

**TECHNICAL PROPERTIES**

<b>Appearance</b>	Red/green/grey colored powder
<b>Application Temperature</b>	Between +5°C and +35°C
<b>Aggregate Hardness</b>	7 Mohs Scale
<b>Determination of Wear Resistance to Rolling Wheel</b>	≤ 1 cm <sup>3</sup> (TS EN 13892-5)
<b>Compressive Strength</b>	≥ 70 N/mm <sup>2</sup> 28 days (TS EN 13892-2)
<b>Flexural Strength</b>	≥ 10 N/mm <sup>2</sup> 28 days (TS EN 13892-2)

**ADVANTAGES**

- Applied on fresh concrete monolithically.
- The abrasion resistance of the MONOFIX 100 applied concrete surface increases 2 – 4 times compared to the normal concrete.
- Becomes part of the surface where it is applied, does not wear and fall off
- Economical and long lasting
- Ready to use. Saves considerable time as it is quick and easy to apply
- Provides resistance to wearing and impacts on concrete surfaces and grout sides.
- Makes the surface resistant to weather conditions and freeze-thaw cycles
- The surface is easier to clean and more resistant to oils than normal concrete.
- Does not oxidize.
- Provides a higher impermeability compared to plain concrete.
- Has various color alternatives.

**CONSUMPTION**Light and moderate loads: 4 - 5 kg/m<sup>2</sup>**PACKAGING**

25 kg kraft bags

## APPLICATION

### PREPARATION OF THE SURFACE

- When MONOFIX 100 is used on old concrete, first pour minimum 7.5 cm C25 concrete. Use **REPOX A** or **AQUALATEX** to increase the adherence between the new concrete and the old concrete and to ensure adhesion.
- The concrete to be applied must be wet enough for MONOFIX 100 to absorb the moisture it needs. The degree of wetness of the surface is extremely important. If the surface is too wet, MONOFIX 100 will disappear in the thickness of the concrete and lose its effectiveness. If the surface is too dry, the product will not bind to the surface and the result will be unfavourable.

### APPLICATION

- Depending on the dimensions of the ground, place 4 – 5 m wide anodes, one full and one empty. Where necessary, place mesh steel inside the anodes and complete the levelling process.
- Gauge the concrete after casting and settle it well with vibrating gauge.
- When the concrete has set enough to leave a maximum of 2 – 3 mm deep footprint, spread 1/2 of MONOFIX 100 evenly on the floor, manually or with a mechanical spreading machine.
- For the best distribution of MONOFIX 100 on the surface, spread it from both sides of the anodes.
- Wait for the material to moisten absorbing the water of the concrete and get a dark colour. Make sure that the colour is homogenous all over the floor. Integrate the material into the floor with a trowel.
- Sprinkle some amount of material on the borders of the anodes and dilatation joints, which are under the highest load, in a strip of 8 cm and spread it with a trowel.
- Sprinkle the remaining 1/2 of the material on the floor, wait for it to get a dark color with moisture and spread on the floor with a trowel.
- When the surface is hard enough to walk on, trowel with a steel trowel (helicopter).

### CURING

Use **KURFIX** curing materials on the surface after the final finishing process, to prevent premature drying and cracking.

### JOINT CUTTING

Joint cutting should be done no later than 2 – 3 days after the concrete is poured. Place **FIXA Polyethylene Joint Sealant** into the joint gaps, fill the remaining gaps with suitable MS, hybrid or polyurethane sealants of FIXA.

### CAUTION

- Avoid application at temperatures below +5°C and above +35°C.
- Avoid application in areas that are frozen, at risk of freezing within 24 hours, or in areas open to direct sun and wind.
- Do not trowel more than necessary, the product should not be thrown away during application to prevent the aggregate from separating from the cement.
- Before the application of MONOFIX 100, trowel the surface with a steel trowel or tray.
- The ambient humidity should be between 40 – 80% relative humidity. At low relative humidity, blooming on the surface, at high relative humidity, sweating on the surface, slower curing and hardening may occur and the application may need to be prolonged.

### SHELF LIFE

Expires in 12 months. Store unopened packages in a dry environment, stack up to 10 packages on the pallet.



## Technical Data Sheet (TDS)

Form No: 5.01 TDS Monofix 100  
Rev: 03 – 08/2022

Date  
01 August 2022

Page  
3 / 3

### HEALTH AND SAFETY

As with all chemical products, avoid contact with food products, skin, eyes and mouth during use and storage. During the application, use work clothes, protective gloves and glasses in accordance with the occupational and worker health rules. Consult a doctor if accidentally swallowed. In case of contact with skin, rinse with water. Do not leave the cover open. Store out of the reach of children.

The application instructions and technical values given for the products have been obtained in accordance with our tests and experiences in accordance with international standards at 23±2°C temperature and 50±5% relative humidity conditions. These values may vary depending on ambient conditions. High temperatures shorten the times, low temperatures lengthen them. Before starting the application, the user should test whether the product is suitable for the application and purpose. FIXA Yapı Chemicals San. Trade Ltd. Sti. is not responsible. This Technical Data Sheet remains valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that the new version is published. It is the user's responsibility to check that the document is up-to-date. Please contact our sales department for more information.