

# TECHNICAL DATA SHEET **FL-HARDENER**



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## SURFACE HARDENER FOR FRESH CONCRETE FLOORS

Cement-based, with quartz fillers, reinforced with chemical additives, surface hardener for fresh concrete mortar

Applied as sprinkling by hand to create a high quality, smooth, concrete floor surface with high abrasion strength for areas that are exposed to heavy traffic (warehouses, malls, factories, concrete roads, etc.).

### ADVANTAGES:

- \* Provides 30% increased concrete surface hardness by it's quartz filler, provides high impact resistance and abrasion resistance.
- \* Provides reducing water absorption of the concrete floor.
- \* Prevents dust formation and damages because of abrasion.
- \* Provides suitable surface for areas exposed to heavy traffic.
- \* Provides long-lasting, functional and decorative coloring on concrete floors with it's color options.

#### SURFACE PREPARATION:

Application surfaces should be clean and sound. Applied concrete should be minimum C25 class. After the concrete application and the levelling of the surface finished, it should be strongly pressed on the surface with the thumb to check if fresh concrete surface is ready for the hardener application or not. If fingerprint depth is about 3-5 mm, the surface is ready for the hardener application.

#### PRODUCT PREPARATION:

25 kg FL-HARDENER surface hardener is ready for use, it is applied as powder. No mortar preparation is required.

## APPLICATION METHODS:

- \* FL-HARDENER surface hardener is sprinkled uniformly and evenly on the entire concrete surface for natural color as minimum 5 kg/m<sup>2</sup> and for other colors as minimum 8 kg/m<sup>2</sup>.
- \* Surface hardener is matured until it absorbs water from the concrete surface and gets wet.
- \* The surface is smoothed by using a mechanical floating trowel.
- \* When the surface is hard enough to walk on it, it is smoothed by the mechanical floating trowel at high speed for a second time.
- \* When FL-HARDENER surface hardener application is completed and the surface begins to lose its free water (when it becomes dull), CURE-AR or CURE-SR concrete curing material must be applied to the surface to prevent stress cracks and dust formation due to sudden water losses.
- \* CURE-AR or CURE-SR should be shaked before using. It is applied uniformly and evenly to entire surface by a roller, brush or a spraying machine.
- \* Ambient and surface temperature should be between +5°C and +30°C during the application.
- \* Any additional material (lime, cement, gypsum etc.) should not be added in the mortar.
- \* Surface should be protected from airflows, sudden temperature changes during and after the application.
- \* Mortar should not be applied on frozen, melting or within 24 hours danger of frost surfaces.
- \* Application time of FL-HARDENER should be well adjusted according to concrete and environmental conditions. It should not be applied to dry concrete surfaces.

Unopened original packages can be stored in dry (%60 R.H.) and cool (+5°C / +25°C) environments for up to 12 months.

## APPLICATION LIMITS:

Maturation Time: 10 min. Drying Time: minimum 1 days

### UNIT CONSUMPTION:

5 m<sup>2</sup> / 25 kg package FL-HARDENER (natural grey) 3 m<sup>2</sup> / 25 kg package FL-HARDENER (other colors)



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Surface Protection Products / Cement Based Surface Hardener

Principle 5.1 (C)

**Reaction To Fire** A1 Sınıfı

Capilary Water Absorption and Water Permeability  $\leq 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$ 

Resistance To Abrasion Taber ≤ 3000 mg

Impact Resistance Sınıf I

Adhesion Strength By Pull-Off ≥ 1,0 N/mm<sup>2</sup>

No Traffic Load/Rigid

Time Required For Opening To Traffic PERFORMANCE DECLARATION NO

1504-2 / PB-06.002

24 hours





H315: It causes skin irritation.

H318: It causes serious eye damage.

H335: It may cause respiratory irritation.

P280: Wear protective gloves/protective cloths/eye protection /face protection.

P305 In case of contact with eyes, rinse carefully with water

P351 a few minutes. If avalible and easy, remove contact

P338: lenses. Continue rinsing.





















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