



**DEFINITION:** Cement-based quartz aggregate surface hardener, designed for medium load applications, applied in powder form on fresh concrete surfaces.

**APPLICATION AREAS:** Used in indoor and outdoor environments, industrial floors, hangars and workshops, garages and parking lots, warehouses, loading and unloading areas, and areas exposed to traffic from wheeled vehicles.

**ADVANTAGES:** Can be easily applied to fresh concrete. Provides a smooth and uniform surface. Prevents wear due to mechanical loads. Offers resistance to impacts. Delays surface dusting.

**SURFACE PREPARATION:** The quality of the supplied concrete should be consistent, and the entire surface must have uniform strength. The concrete must be fully compacted, with a minimum C25 (350 dosage, 25 N/mm<sup>2</sup> strength) and minimum water-cement ratio. The thickness of the concrete layer should be a minimum of 15 cm. Concrete with trapped air is not suitable for surface hardener application. The surface of the fresh concrete should be leveled with a wooden float.

**APPLICATION INSTRUCTIONS:** The concrete should be allowed to set until it is walkable. The depth of foot imprints should be 0.5-1.5 cm. Depending on conditions, allow the bleed water to evaporate from the surface. For mechanical applications, distribute 4-8 kg/m<sup>2</sup> of **Petek Solid Floor 32** evenly over the surface immediately after sprinkling. For manual applications, it is recommended to perform the sprinkling in two stages (2/3 of the total amount in the first stage and 1/3 in the second stage). Ensure an even distribution without creating waves on the surface. Avoid sprinkling from more than 2 meters away. Allow the sprinkled material to absorb moisture from the concrete. Observe color changes to ensure adequate moisture levels. Finish with a low-speed mechanical trowel (helicopter). Do not add water to the surface hardener. Final corrections can be made manually or with a helicopter trowel. Loose or bleed water on the surface indicates that the concrete is still fresh. As soon as the concrete achieves the appropriate hardness level, perform preliminary corrections with a low-angle, low-speed metal blade trowel, followed by final corrections with a high-speed trowel.

**WARNINGS AND RECOMMENDATIONS:** Avoid application in environments with excessive air flow. Avoid using on concrete containing fly ash as it may reduce workability. Differences in water and cement content in the concrete can cause slight color variations. Protect from environmental effects and ensure clean application for color consistency and continuity. It is normal to observe color variations during the drying process. Proper timing and finishing techniques are essential. The application temperature should be between 5-35°C. High temperatures accelerate application, while low temperatures reduce application speed and time. Surface blooming may occur under relative humidity below 40%. Under relative humidity above 80%, sweating, slow curing, and hardening may occur. Slip-resistant surfaces can be achieved using chemical abrasion methods. Surface hardeners improve abrasion and impact resistance but do not affect concrete strength. Curing should be performed after **Petek Solid Floor 32** application. Clean all tools and equipment with water after use.

**PACKAGING AND SHELF LIFE:** Available in 25 kg bags, with 64 bags per pallet (1600 kg total). Shelf life is 1 year from the production date when stored in a dry and moisture-free environment. Seal the packaging tightly if not in use.

#### Technical Specifications:

##### Structural Component:

Cement

##### Appearance-Color:

Gray Natural Powder

##### Shelf Life:

12 month in unopened packaging, in a dry environment

##### Consumption Rate:

4-8 kg/m<sup>2</sup>

##### Application Temperature Range:

(+5°C) - (35°C)

CE	
PETEK -KİMYAPİKİMYASALLARIİTH.	İHR. SAN. TİC. LTD. ŞTİ
Topraktaş Mah. Topraktaş6Sk. S.S.Kund.	Küç. San. Sit. B4
No:2/SBağlar/Diyarbakır/Türkiye	
24	
In compliance with TSEN13813 Standards	
Public Works Position No: 15.190.1002	
Compression Strength: (7 days, EN196 -1) 80N/m <sup>2</sup>	
Abrasion Resistance: (28gün -days TS699) ≤2cm <sup>3</sup> /50cm <sup>2</sup>	
QUARTZ AGGREGATE SURFACE HARDENER	