# POMEX GROUND SURFACE HARDENER



# **Quartz-Silica Aggregate Surface Hardener for Industrial Grounds**

# Description

It is quartz –silica aggregate ground surface hardener which protects the grounds against impact and abrasion, is applied to the surface of the fresh concrete and screed, and is cement-based with a special graduation.

# Certified to TS EN 1504-2 TSE EN 13813 CE.

Ministry of environment and urban planning, Pose No: 04.613/3F04-3F05

#### **Areas of Usage**

- \* Applications with intense medium and heavy traffic, shipyards,
- \* Indoors and outdoors, warehouses, garages and parking areas,
- \* Industrial building floors, fresh concrete surfaces which are required to be mechanical abrasion resistant and dust-free, such as repair shops and workshops.

#### **Features of Product**

- \*POMEX SURFACE HARDENER applied surface is extremely durable against impact and abrasion.
- \* Impermeability is high.
- \* It prevents the concrete dusting.
- \* It is easy to apply to carrier concrete.
- \* It includes quartz aggregate comprising special granulometric grain size.

# Application Procedure Concrete pouring

After plaster strips are prepared, the concrete is poured. Concrete is compressed with vibratory screed. A last correction can be done with a wooden trowel. The carrier concrete of the field on which **Pomex floor surface hardener** will be applied should be at least in C25 or 350 dose class.

#### Method of application

The concrete surface on which an application will be performed should not be too wet or too dry. If the concrete is too dry, surface hardener will not merge with concrete and it will be peeled off from floor. If the application is made when concrete is too wet, surface hardener will be separated, the required strength and endurance in the surface will no longer be received. If there is a 0.5-1.5 cm deep footprint when stepping on the concrete, the application is started.

The ground should be wet enough to let surface hardener get the needed moisture. In the application area; POMEX SURFACE HARDENER bags are stacked around the plaster strips according to the quantity of consumption. It is homogenously thrown to the surface by hand or mechanical spreader. It is expected that the material sprinkled changes its color by pulling the water of the concrete. POMEX Surface Hardener which is homogeneously sprinkled and colorchanged by pulling the water of concrete is compressed with polishing tray and its integration is provided with concrete. For applications above 5 kg/m<sup>2</sup>, 2/3 of the material is first scattered and disk operation is performed. Then, 1/3 of the remaining material is scattered. Polishing operation is performed again with the disk. After rough polishing process, final polishing should be made until the desired brightness is provided by means of fine knife adjustments. During the application, water should not be sprinkled to the surface.

# Curing

After the implementation of the material, **Parkür**, **Curing 105** or **Curing AST** products which are the curing materials should be applied to the surface in order to evaporate the hydration water quickly, prevent the shrinkage cracks and provide dust-free feature. The expansion grouts should be created by cutting at least 4 mm wide, no later than 24 hours after the concrete casting.

*eile* Polyurethane Sealant must be implemented to avoid adverse situations such as refraction and dust emission in the grouts.

#### Consumption

3-8 kg/m<sup>2</sup> according to the state of the load and traffic (in color applications, min. 5 kg/m<sup>2</sup>)

#### Points to take into consideration

- \* Ground surface hardener must be applied by the expert implementers.
- \* Application should be carried out in the range of + 5 °C to + 35 °C temperature.
- \* It should not be applied on the surfaces that are frozen, melting or under the risk of frost within 24 hours.

## **Cleaning of Tools**

After the application, tools and equipment used should be cleaned with water. After the material has hardened, it can only be cleaned mechanically from the surface.





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### **Technical Specifications**

Structure of the Material: contains Quartz-Silica Aggregate and polymer modified special cement.

Color: Natural (concrete-grey)

Compressive Strength: 50-70 N/mm<sup>2</sup> (28 days)

Temperature of application ground: +5  $^{\circ}$ C to +35  $^{\circ}$ C

Abrasion resistance: 6,5 cm<sup>3</sup>/50 cm<sup>2</sup>

(by Böhme method)

### Packaging Kraft sacks of 25 kg

#### Storage

It must be stored unopened in its original packaging, in cool and dry conditions with a maximum 10-fold stacking.

## Shelf Life

12 months from the date of production in the specified storage conditions and in unopened packaging.

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POMZA EKSPORT SAN. TİC. AŞ.-EİLE

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EN 13813

Reaction to fire class: A 1

Abrasion Resistance: 1636.7 mg (Taber)

Compressive strength: C70 Bending strength: F10

Safety Recommendations: Please wear the coveralls, protective gloves, glasses and mask suitable for occupational health and safety. Make sure that it does not contact the skin and the eyes; in case it does, wash with plenty of water. In case swallowed, contact the closest health care institution immediately. Keep out of the reach of children. Keep food and drinks away from the application areas.

Responsibility: In case the recommendations and application conditions specified above are not conformed, the applications (misuse) do not fall under the responsibility of POMZA EXPORT A.Ş., the producer of eile POMEX branded products. The user is responsible for whether the product is used in accordance with its purpose, as well as the validity of application conditions and forms. eile Pomex Construction Chemicals does not accept any indemnity claim concerning the results, work accidents, direct or indirect damages or losses due to the misapplication of the products.

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<sup>\*</sup> Typical values: in the conditions of + 23 ° C, 50% relative humidity, it has been obtained as a result of tests performed in 4x4x16cm mortar prisms. Values may vary due to differences in site environment.