



# POLPO for BUILDING CHEMICALS & TECHNOLOGIES

## PRODUCT DATA SHEET

# FLOOR HARDENER® Premium cement mortar

## DESCRIPTION

FLOOR HARDENER® is a ready-to-use mixture of cement, pigments, additives and hard aggregate of mineral origin. The particles have been specially selected for their shape, grading, high physical quality and mechanical performance.

## USES

FLOOR HARDENER® may only be used by experienced professionals.

FLOOR HARDENER® is added to slab surfaces to improve their resistance to abrasion and inhibit dust formation. FLOOR HARDENER® is suitable for all floors exposed to severe mechanical wear, such as:

- Warehouses, quays, traffic lanes.
- Workshops.
- Car parks, service stations, garages etc.

## CHARACTERISTICS / ADVANTAGES

Advantages :

- Good abrasion resistant .
- Reduces surface`s dust.
- Improves resistance to impact.
- Increases the concrete surface`s hardness .
- Easy application; FLOOR HARDENER® is sprinkled into the freshly placed concrete.
- Saves time and labour costs by eliminating the need for a monolithic screed.
- Even finish obtainable when properly smoothed.

## SUSTAINABILITY

VOC Content < 0 g/L

25KG



## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY

- The concrete deliveries must be of consistent quality.
- A concrete slump in the range 75 to 110 mm will normally give best results.
- The slab must be of good quality concrete with a minimum water/cement ratio consistent with the production of a fully compacted slab.
- The compressive strength must be a minimum of 25 N/mm<sup>2</sup>.
- The concrete should contain an adequate proportion of cement (300-350 kg/m<sup>3</sup>) and the slab should be at least 12 cm thickness for the best result.
- Flatten out the freshly poured concrete with a vibrating beam. As soon as its plasticity permits, smooth the concrete preferably using a mechanical trowel.
- Air Entrained Concrete is not a suitable substrate for the application of dry shake hardeners.

### SUBSTRATE PREPARATION

The concrete should contain an adequate proportion of cement.

Level the freshly poured concrete by means of a vibrating beam. As soon as the plasticity permits, smooth the concrete preferably by using a mechanical trowel.

### APPLICATION

The concrete slab is ready for the Chapdurs cement coating when a thumb pressed hard onto the surface only leaves a 'print' of about 3 - 5 mm depth.

Broadcast the mix evenly by hand or with suitable device. Apply approx. 3.0 to 5.0 kg/m<sup>2</sup>

If parts of the surface come loose or if the laitance rises, this means the concrete is still too fresh.

### Smoothing :

As soon as the plasticity or initial set allows, perform preliminary smoothing with the same machine running at low speed but equipped with metal smoothing blades, set at minimum angle. Any final smoothing required should be performed later with the machine running at high speed.

### CURING TREATMENT

FLOOR HARDENER® surface must be protected to prevent early dry-out, crazing and bloom. Immediately after smoothing, (dosage approx. 6 –10 kg/m<sup>2</sup>).

### Joints:

Floor joints should be sawed out with a light saw within 1-7 day(s) after application according to the ambient temperature.

After finishing operations and completing saw cuts, clean off any residual saw lubricant / slurry without delay.

### FURTHER INFORMATION

- Never add water to the surface where the dry shake has been applied.
- The application of the dry shake powder must not be carried out in strong wind or draughts.
- Do not use concrete where some cement has been replaced by fly ash, as this makes the mix sticky and less workable.
- Variations in concrete characteristics such as water content and cement quality may lead to slight colour variations.
- To ensure optimum of colour consistency, it is essential that the floor laying operation is as clean and protected from the environment as possible.
- Colour variation during the drying out period is normal for this system and is to be expected
- Every effort must be made to ensure an even application of **FLOOR HARDENER®**. Correct timing and trowelling techniques are essential.

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## PRODUCT INFORMATION

<b>Composition</b>	Blend of high grade mineral aggregates mixed with cement, admixtures and pigments.
<b>Packaging</b>	25 kg per Bag .
<b>Shelf life</b>	12 months from date of production if stored properly in original unopened packing.
<b>Storage conditions</b>	Original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.
<b>Density</b>	~ 1.4 kg/l.
<b>Abrasion Resistance</b>	> 375%
<b>Compressive Strength</b>	77 N/mm <sup>2</sup>
<b>Tensile Adhesion Strength</b>	> 1.5 N/mm <sup>2</sup>
<b>Water Absorption</b>	4.83%



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### WARNING

- Keep the product out of the reach of children
- Empty container is not suitable for food
- In case of contact with eyes, wash immediately with water
- Use in well-ventilated areas



### Storage and expiration

12 month from the date of manufacture, in its original closed packaging, stored away from humidity.