

# STONE HARDENER

High-quality stone hardener based on tetraethoxysilane.

## Product description

is a solvent-free stone consolidator (stone hardener) based on tetraethoxysilane, better known as ethyl silicic acid ester. Stone Hardener is used to harden and repair weathered stones and other mineral building materials. Stone Hardener reacts with moisture to form a polymeric silica network. The network recaptures the broken-down mineral particles and permanently stabilises and repairs the substrate. Stone Hardener does not affect the water vapour permeability of the substrate. Stone Hardener does not result in any water repellent effect or colour change.

## Use

Stone Hardener can be applied on all weathered mineral substrates including sandstone, limestone, masonry, terracotta, concrete and stucco.

## Characteristics

- Highly water resistant
- 1-component and solvent-free
- Strong penetration capacity
- No colour deepening
- No water-repellent effect
- No dirt pick-up on the substrate
- 100% water vapour permeable
- Repaint-able

## Technical data

Odour:	Transparent
Colour:	Characteristic
Specific weight:	1,04 kg/L
Flash point:	60 °C
Contains:	Tetraethoxysilane

## Application conditions

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Ambient temperature:	maximum 30°C, minimum 5°C
Substrate temperature:	maximum 30°C, minimum 5°C
Relative humidity:	max.95% and 3°C above dewpoint
	During application and drying.

## Instructions

1. Clean the surface carefully in order to minimise the loss of mass of the weathered stone.
2. Apply Stone Hardener, preferably undiluted, to the dry and cleaned surface.
3. Apply Stone Hardener with a brush, by immersion or with a low pressure sprayer.
4. Apply an even and saturating layer to the surface, working from the bottom up. It is recommended to repeat this procedure several times wet on wet.
5. After saturating the surface, remove excess material with a dry, lint-free microfibre cloth in order to avoid a shiny surface.

6. Tools and spilt product can be cleaned with white spirit.
7. If necessary, the surface can be treated again with Stone Hardener after three weeks from the first treatment.
8. The effect of consolidation with Stone Hardener is fully developed after 2-3 weeks.

## Drying

Dry:	after 24 hours
Complete consolidation:	2-3 weeks

## Packaging

10 and 25 L

## Consumption

Consumption is 0,5-5 L/m<sup>2</sup>, and is highly dependent on the substrate and degree of weathering.

## Practical information

- After treatment do not expose to rain for a few days
- The surface will not get water-repellent after treatment. Subsequent impregnation with Mavroseal Wb Strong or Mavroseal is recommended.
- Full consolidation developed after 2-3 weeks.
- Do not apply in direct sunlight.

## Storage

Can be kept for at least 12 months in original unopened packaging. Store in a cool, frost-free place.

## Health and safety

Avoid skin and eye contact, wear suitable gloves, long clothes and safety glasses. Keep away from heat and sources of ignition. If in doubt, always consult the safety data sheet or our R&D department.



## Technical support

Mavro is ISO 9001 certified: your guarantee of quality, in terms of products and advice. Our technical consultants and R&D department are always at your service. We are happy to look at your problem or wish with you. Help you with our products or find a solution if it does not yet exist. Call, e-mail or drop by.

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