

CIKO Hydrotard

Smart Chemical Solutions



Concrete surface retarder for exposed aggregate

Description

CIKO Hydrotard is a concrete surface retarder that retards but does not “kill” the set of the mortar at the surface of the concrete. It contains organic agents which react with calcium, magnesium and aluminate ions of the cement to slow the curing cycle and thus allow the surface mortar to remain workable for a longer time.

CIKO Hydrotard is available in two grades CIKO Hydrotard S and CIKO Hydrotard C.

The former is applied directly over the shutter by brush or roller.

The latter is applied directly over the concrete substrate by spraying means.

Properties

- Safe to use – easy to apply
- Works quickly and effectively
- Non Flammable
- Provides up to 6 mm depth retardation
- Reduces cost of preparing surfaces for waterproofing, stucco or plaster application
- Eliminates the need for expensive and detrimental bush hammering.
- Eliminates need for sandblasting
- Water based has very low odour. Ideal for areas of poor ventilation.

Application area

- To create exposed aggregate surfaces on pre cast panels or slabs for architectural aesthetics.
- To roughen concrete walls for improved bonding of subsequent waterproofing or plastering works.
- To walkways, curbs and roadway surfaces for both architectural and anti-slip properties.

Physical properties

Form	Liquid
Colour	Brown
Specific gravity	1.05±0.05 @25°C
VOC (EPA 24)	<10 g/l

Coverage

Depend on depth of retardation, CIKO Hydrotard coverage rate varies between 3 and 5 m² per liter. However once it is applied on the mould shutter the coverage rate shall reach up to 10 m² per liter for the same depth of retardation.

Application instructions

CIKO Hydrotard is a ready to use material that should be applied over formwork or concrete which is free from dust and loose particles by steel trowel, brush or spray.

For face down applications, CIKO Hydrotard S should be applied and kept to dry prior to placing concrete; this typically within 30 minutes depending upon ambient conditions.

For face up applications, CIKO Hydrotard C should be sprayed over concrete immediately following final placing and finishing, whilst the concrete is still wet.

Protect the applied surface from dust and loose particles by covering with polyethylene sheet.

Within 24 hours wash the concrete surface with plenty of water to remove un-hydrated cement particles to expose the aggregate surface.

During concrete pouring care should be taken so that the needle vibrator, if used, should not come in contact with the face of shutter.

When the concrete has hardened to 10 N/mm², or about 24 hours, the retarded mortar surface can be flushed off with a stream of water and/or removed by scrubbing with a stiff brush. Since CIKO Hydrotard do not permanently “kill” the set, it will permit the concrete to eventually attain a set and achieve full strength if left on the

concrete or unintentionally splashed over other fresh concrete.

For better efficiency the shuttering must be de-shuttered in 24 hours and wash the concrete surface with plenty of water to remove un-hydrated cement particles to expose the aggregate surface.

Packing

CIKO Hydrotard is available in 5, 20 litre and 200 liter packing size packing sizes.

Shelf life

CIKO Hydrotard has a minimum shelf life of 12 months if stored in accordance with manufacturer instructions.

Storage

CIKO Hydrotard should be stored under enclosed shaded area.

Precautions

- Steam curing is not allowed.
- When CIKO Hydrotard to be applied prior to the application of new concrete,
- Upon the application of CIKO Hydrotard prior to place a new concrete placed after 24 hours from the time of application of CIKO Hydrotard.

Health & safety

CIKO Hydrotard should not come in contact with eyes or be swallowed. If it comes in contact with eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- *Concrete admixtures and additives*
- *Waterproofing and damp proof coatings*
- *Surface treatments*
- *Flooring and toppings*
- *Grouts and anchors*
- *Tile adhesives and grout*
- *Concrete repair materials*
- *Adhesives and bonding agent*
- *Protective coating*
- *Joint Sealants and Moulding compounds*
- *Ancillaries*