

Optimum Coating Solutions Pty Ltd

ABN: 6612 4555 371

Construction Chemical Specialists

OPTEK H (Aqueous Solution) Surface Hardening and Migrating Corrosion Inhibitor

PRODUCT INFORMATION BULLETIN

January 2020

DESCRIPTION

Optek H is a chemically blended aqueous solution, free of chlorides, especially formulated as a Penetrative Corrosion Inhibitor that significantly hardens the surface and increases the durability of reinforced concrete. Laboratory and field testing indicates that treatment with **Optek H** will provide protection for greater than 10 years.

USES

- As a performance and durability enhancer of existing concrete structures **Optek H**:
 - Densifies and hardens the surface layer.
 - Increases impermeability, chemical resistance and durability.
 - Restores (as a Penetrative Corrosion Inhibitor) the protective properties of the concrete against reinforcement corrosion.
- On new hardening concrete, **Optek H**:
 - Promotes efficient cement hydration during of the curing phase.
 - Reduces surface cracking.
 - Increases surface hardness, impermeability and durability.
 - Enhances (as a Penetrative Corrosion Inhibitor) concrete protective properties against the steel reinforcement corrosion.
- As a primer for most cementitious renders and acrylate coatings. **Optek H** increases the adhesive bond strength of the renders and acrylate coatings.
- As a hardener and durability enhancer of brickwork joints.

AREAS OF USE

- Restoration of degraded concrete structures (approved for use on Heritage sites).
- Dust proofing of factory floors.
- Surface hardening and abrasion resistance of concrete surfaces i.e. floors, roadworks, bridge decks etc.
- Reinstatement of poorly finished concrete.
- Primer for cementitious render.
- Water retention agent for new hardening concrete.

INSTALLATION (Refer SDS before applying)

Surface preparation: **Optek H** must be applied to a clean surface free of contaminants. Pressure washing is recommended as minimum preparation.

Application: **Optek H** is a ready to use product which can be applied by spray, brush, mop or broom. Apply to clean, dry or damp surface.

Application rate: Depends on the absorbency of the surface but usually in the range of 3 – 5 square metres per litre.

Optek H is normally applied as a single coat but if further coatings are deemed necessary for badly degraded concrete a second and third coat can be applied. Allow 2 to 4 hours between further coatings, enabling each coating to impregnate into the concrete.

Curing time: Not applicable, treated concrete can be put into service as soon as the surface is dry.

PROPERTIES OF TREATED CONCRETE

Friction abrasion resistance – Russian Federation Standard 13087 (Analogue of DIN 52108)
Mass loss is reduced by up to 40 times.

Impact abrasion resistance

AS/NZS 4456.9-2003

The abrasion resistance is increased.

Chloride Ion Diffusion

NT Build 443 1995 – 11

Reduced approximately two times.

Reinforcement corrosion inhibition

Polarisation curves method

Steel reinforcement is passivated and hence corrosion is inhibited.

Water absorption

Taywood Engineering Test

Absorption is decreased by approximately 25%.

Water retention for new hardening concrete

AS 3799 – 1998

Water loss is reduced by approximately 20%.

Slip resistance

Optimum Coating Solutions Pty Ltd
Assemco Business Hub
2 Merrindale Drive.
Croydon South 3136 Victoria

sabri@optiglo.com.au
www.optek1.com.au

Sabri Ibrahim
Phone: 0432 178 934

Optimum Coating Solutions Pty Ltd

ABN: 6612 4555 371

Construction Chemical Specialists

OPTEK H (Aqueous Solution) *Surface Hardening and Migrating Corrosion Inhibitor*

PRODUCT INFORMATION BULLETIN

January 2020

AS/NZS 4586 – 2004
Unchanged by treatment.

Optimum Coating Solutions Pty Ltd
Assemco Business Hub
2 Merrindale Drive.
Croydon South 3136 Victoria

sabri@optiglo.com.au
www.optek1.com.au

Sabri Ibrahim
Phone: 0432 178 934