

ConProtect WP1

Liquid waterproofing crystallizing concrete admixture

DESCRIPTION

ConProtect WP1 is an easy-to-use liquid concrete admixture based on crystallization technology.

ConProtect WP1 is used to ensure concrete waterproofing and to seal microcracks in moist environments.

The crystallization-based additive chemically reacts with cement, filling the pores and capillaries of the concrete with a sealing, insoluble structure.

APPLICATION

ConProtect WP1 is used for waterproofing basements, water tanks, roofs, reservoirs, dams, wastewater treatment plants, swimming pools, water treatment plants, tunnels, marine structures, etc.

- Concrete and reinforced concrete
- Underground concrete structures
- Other concrete and reinforced concrete structures
- Plaster mixes

ADVANTAGES

Using **ConProtect WP1** significantly improves the strength and durability properties of concrete.

- Seals microcracks. Seals hairline cracks up to 0.5 mm.
- Fully waterproof concrete.
- Increased durability.
- Protection against chloride and sulfate penetration.
- Withstands hydrostatic pressure.
- Enhances chemical and carbonation resistance.
- Faster construction progress.
- Permanent water tightness.
- Integral waterproofing.
- Non-toxic.
- Improves workability and strength.
- May reduce the consumption of other admixtures.
- Concrete application is not limited by weather conditions.
- The liquid does not form clumps like powders and is easy to dose automatically.
- Enhances the hydration process.

DOSAGE AND APPLICATION

ConProtect WP1 - Liquid

ConProtect WP1 is added to the concrete mix at the batching plant using an automatic dosing system at a dosage of **1% of the cement weight**. Under specific conditions, the dosage may be increased to **2% of the cement weight** to meet project-specific requirements. **The amount of water in the concrete mix must be reduced according to the amount of the additive.**

The final dosage must be adjusted based on the quality and composition of the cement. ConProtect WP1 should be added either simultaneously with the mixing water or immediately after—it must never be added together with other admixtures. We recommend testing compatibility with other concrete admixtures separately.

A longer mixing time ensures the product is evenly distributed throughout the system, enhancing its effectiveness. For optimal dosing, consult the material manufacturer SL Protection $O\ddot{U}$.

OVERPROPORTION

Overproportion of ConProtect WP1 results in increased pumpability, faster hardening is possible. In case of accidental overproportion the strength and hardening of the concrete must be checked before removing the formworks. Usually there are no long-term adverse side effects from overproportion if the correct hardening with water has taken place before removing the formworks. Generally the strength improves in 28 days. If in doubt, contact SL Protection's Technical department.

PROPERTIES

- Standard EN 934-2
- Compressive strength up to 115%
- Increases the air content by a minimal amount 0,4%
- Significantly increases sulfate resistance up to 25%
- Reduction in cement laitance release up to 75%
- Pressurized water penetration 7mm (Test report N° 345/20)
- Maximum water penetration depth (mm) according to EN 12390-8 High water resistance (W8) ≤ 10 mm
- Self-healing effect on cracks: Test report N° EWS 12002021/44
- Very good self-healing properties
- Does not affect frost resistance





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Property	Unit	Value
Active Content	%	<60
Appearance		Transparent Liquid
Density	g/m ³	~ 1,25 (20 °C)
viscosity	mPa·s	12 (25 °C)

STORAGE

The product must be kept in the shade at a minimum temperature of 7 °C. When stored in suitable conditions and in original sealed container, the shelf life is 12 months. Stir before use and protect from freezing.

PACKAGING

ConProtect WP1 (liquid) is available in 1000 L IBCs. At the customer's request, it is possible to pack into other containers, such as 25 L jerricans or 200 L barrels.

WASTE DISPOSAL

When disposing of waste, follow local waste management regulations and take hazardous waste to an appropriate collection point.

HEALTH AND SAFETY

Before using ConProtect WP1, carefully read its Safety Data Sheet (SDS) to obtain information on safety, toxicology, and proper transportation, storage, and usage.

The Safety Data Sheet is available on request via info@slprotection.eu or upon request from your local representative.

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SL Protection OÜ

Vana-Narva mnt. 30, Maardu, 74114, Harju maakond, Estonia

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1504-CPR-0516 EN 934-2:2009+A1:2012

Crystallizing concrete admixture that increases water resistance

EN 934-2:T2 ConProtect WP1

Chloride ion content Up to 0.1 % by mass Alkali content Up to 10 % by mass

Contains only

Corrosivity components according to

EN 934-1:2008 Annex A.1

Hazardous NPD (No Performance

substances Determined)

CONTACT OF THE MANUFACTURER

SL Protection OÜ Vana-Narva mnt 30, Maardu, 74114, Harju maakond, Estonia Tel. (+372) 55666174 http://www.slprotection.eu

E-mail: info@slprotection.eu





