

Evercrete Vetrolfluid®

ORIGINAL EVERCRETE FORMULA



FOR PROFESSIONAL USE ONLY - REVISION DATE: 2025

Evercrete Vetrolfluid® is a special waterproofing agent for protecting concrete from deterioration. Its formula is based on waterglass with a special modifier that allows the product to penetrate into the concrete from 10 mm to 40 mm. Evercrete Vetrolfluid® seals the pores of the concrete and becomes a permanent barrier. Evercrete Vetrolfluid® permanently waterproofs, hardens and protects all types of concrete.



cement dust into the environment, effectively obstructs the penetration of pollutants and therefore makes the environment healthier.

Evercrete Vetrolfluid® improves fire resistance, it is completely fireproof and keeps its features at any temperature, compatibly with the physical limits of the treated concrete.

Evercrete Vetrolfluid® can be used on driveways and it is compatible with other finishes and overlays.

Evercrete Vetrolfluid® is an odourless, colourless and non-toxic product.

Evercrete Vetrolfluid® is compliance with the prescriptions of the 305/2011 EU Regulation and meets the requirements of the standard EN 1504-2.

Uses

- Underground walls to waterproof from both inside and outside.
- Concrete bridges, underpasses, dams and tunnels to waterproof and protect from deterioration and corrosion.
- Purification plants, wells and storage tanks in contact with aggressive substances.
- All immersed concrete structures to block attacks from chlorides.
- Biogas plants and bunker silo to protect the concrete from biomass, gases and leachates.
- Farm structures and cellars (cattle sheds, barns for cereals and hay, and piggeries).
- Drinking water tanks.
- In contact with drinking water, sewage and wastewater.
- In contact with aggressive substances and hydrocarbons.
- Concrete subject to severe climatic conditions.
- Foundations and basements to block rising damp.
- Basements which seep moisture.
- Anywhere you want to increase durability of work in concrete.
- Floors and slabs, as temporary or definitive waterproofing treatment.
- Burialcryptsvaults or tombs.
- Pipes and irrigation channels.
- Exposed concrete.
- Precast concrete and Jersey barriers.

Properties

Evercrete Vetrolfluid® guarantees permanent waterproofing of concrete even with negative pressure till 10 atm. It is a permanent and definitive treatment.

Evercrete Vetrolfluid® provides the concrete with an extraordinary resistance to freezing and thawing cycles, and chlorides, sulphates and de-icing salts attack.

Evercrete Vetrolfluid® completely blocks the phenomenon of carbonization and the penetration of chlorides (UNI 9944). It keeps a stable alkaline environment over the time and totally protects the reinforced bars.

Evercrete Vetrolfluid® is certified for use in contact with drinking water and is suitable for waterproofing and protecting concrete tanks and surfaces for use in contact with food.

Evercrete Vetrolfluid® provides the concrete with excellent resistance to chemical attacks.

Evercrete Vetrolfluid® blocks water/rising damp when applied to the foundation.

Evercrete Vetrolfluid® prevents the concrete from releasing

Technical features

Composition	Proprietary blend of waterglass in aqueous solution
Storage	36 months if stored sealed
Flammability	Not flammable
Environmental risk	None
Organic properties	Odourless, colourless liquid
Storage	Store in a dry place. Keep away from glass and Aluminium
VOC content	None
Curing	36 days. Walkable after few hours
Packaging	6 kg / 20 kg Ecobox / 1000 kg Tank

Application

Please refer to the material safety datasheet on www.ecobeton.com.

The product should be applied in two coats, on perfectly clean surfaces free from residues of oil and grease. It can be applied by spraying, roller or brush. Application by spraying is recommended using low-pressure pumps (max 5 bar) normally available for gardening (both manual and electric). On concrete casted in formworks, after having removed the release agent. On old concrete, wet the surface the day before application. Stir the product thoroughly before use. **Evercrete Vetrolfluid®** can also be applied in wet concrete: however repairs must be carried out first of all in case of water leaks.

Apply the first coat to saturation without letting the product drip; apply the second coat after the first one has dried up. Apply from the bottom upwards on vertical surfaces. The product is cured in 36 days; however the surface is ready after a few hours: any coatings compatible with wet substrates (plaster, concrete castings) can be applied after few hours, while it is recommended to wait at least 2-3 weeks for treatments that require a completely dry base (paints, resins, etc.).

Application on underground structures:

Repair all panel holes and gravel nests with a mortar/concrete. Treat the surface with **Evercrete Vetrolfluid®**. The product is not effective on concrete joints, which have to be waterproofed with other products (e.g. waterstop). It is possible to cover the treated surfaces with soil after 12 hours and no particular protective measures are necessary.

Repair:

Follow the instructions provided in the specific guide available on the website www.ecobeton.com.

Buildings:

To eliminate the humidity and water seepage on old basements or buildings, it is possible doing it from the inside after removing all the surface coatings and overlays (paint, plaster, etc.).

1. Wet the surface.
2. Spray **Evercrete Vetrolfluid®**, until it is saturated.
3. Wait for a few days.
4. Repeat the treatment.

If efflorescence are observed during the days after the

application, remove it mechanically avoiding water pressure. If the surface is particularly wet it may be necessary to repeat the procedure to obtain the desired result.

Warning

Temperature: do not apply below 5°C or above 40 °C. Do not apply when rain is forecast within 6 hours.

Glass and Aluminium: protect glass and aluminium during application (watches, glasses, etc.) as they can be damaged by the product.

Coverage rate

The coverage rate per square metre varies depending on the absorption of the surface treated. In general, treat the concrete until saturated.

Coverage rate varies from 250 to 500 g/m² of **Evercrete Vetrolfluid®** in total.

Note:

The information contained in this sheet is accurate to the best of our current knowledge. The products are guaranteed and have the highest quality and standard with regard to product tolerances. As it is impossible to carry out any controls on the application of the product, no express or implicit guarantee is provided as regards the final result and no responsibility is accepted directly or indirectly by the use of the products. Users are encouraged to carry out tests before application.

Certification

 0094		Ecobeton Italy Srl Via Galileo Galilei 47, 36030 Costabissara (VI) 08 DOP n° 140107DOP-1504-2
		UNI EN 1504-2:2005 Evercrete®- Vetrolfluid® Products for the concrete protection on buildings and works of civil engineering impregnation
EN 1339 EN 1062-3 EN 13529 EN 13687-1 EN ISO 6272-1 EN 1542 EN 13501-1	Abrasion resistance: improvement > 30% Capillary absorption and water permeability: $w < 0,1 \text{ kg/m}^2 \times h^{0.5}$ Chemical resistance (astringent attack): no visible defects Thermal compatibility: $\geq 1,5 \text{ N/mm}^2$ Falling-weight test: Classes III: $\geq 20 \text{ Nm}$ Bond strength by pull-off: $\geq 1,5 \text{ N/mm}^2$ Reaction to fire tests: Euroclass A1 Slip/skid resistance: NA Depth of penetration: > 10 mm Dangerous substances: absent	

The above technical data has been obtained with a dosage of 400 g/m².

Performance characteristics

European Standard		
Properties	Reference Standard	Result
Abrasion Resistance	EN 1339 (Annex G)	Improvement >30%
Capillary absorption and water permeability	EN 1062-3	$w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0,5}$
Chemical resistance	EN 13529	No visible defects
Thermal compatibility (freeze thaw cycles)	EN 13687-1	$\geq 1,5 \text{ N/mm}^2$
Impact resistance (Falling-weight test)	EN ISO 6272-1	$\geq 20 \text{ Nm}$ (Class III)
Bond strength by pull-off	EN 1542	$\geq 1,5 \text{ N/mm}^2$
Reaction to fire	EN 13501-1	Euroclass A1
Depth of penetration		> 10 mm
Carbonation depth	UNI 9944	Total resistance
Contact with drinking water	DM 21/03/73 (Italy) BS 6920 (England)	Suitable Suitable
Freeze-thaw cycles resistance	UNI 7087/72	No visible damages after 300 cycles
Wear Resistance (BCA)	BS EN 13892-4	Class AR 0.5

ASTM Standard		
Properties	Reference Standard	Result
Rapid Chloride Ion Penetrability	ASTM C1202	61% reduction of Coulomb charge that passed through the sample compared to untreated.
Water Vapour Transmission	ASTM E96	26% reduction compared to untreated sample.
Freeze/Thaw Resistance	ASTM C666-15	After 300 cycles: Durability factor: 94% Length change: 0% Weight change: 0%
Chloride Ion Penetration	ASTM C1543	Comparison over untreated sample: 10-20 mm depth : < 63,3% 25-35mm depth : < 69,7 % 40-50mm depth: < 48,4%
Effect on ASR susceptibility of concrete	ASTM C1260	26 -35 % Improvement over untreated sample
Rate of Absorption of water	ASTM C1585-15	- Initial rate of Absorption $0,0056 \text{ mm/sec}^{1/2}$ - Secondary rate of Absorption $0,0010 \text{ mm/sec}^{1/2}$ - 52% reduction compared to untreated sample
Abrasion Resistance of Concrete Surfaces by Rotating Cutter Method	ASTM C944-12	10% Improvement over untreated sample.
Water Loss through liquid membrane	ASTM C156-20	Comparable to the most used membrane curing compound.

Other Tests		
Properties	Reference Standard	Result
Salt Scaling Resistance	MTO LS-412 (Canada)	$0,123 \text{ kg/m}^2$ (after 50 freeze-thaw cycles) – complies OPSS 1352 requirement.
Water permeability of concrete	CRD-C 48-92 (Army Corps of Engineers)	Water permeability: $5,36 \cdot 10^{-12} \text{ (ft}^3\text{/sec)/ft}^2$.

For more details visit website:

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