

WATER REPELLENTS

BKK ECO

Water based transparent and breathable water repellent for façades

Colourless, water-based siloxane coating, suitable for protecting absorbent walls made of brick, stone, cement, etc. from rainwater infiltration. It does not alter the colour of the masonry, protects against frost, blocks the penetration of humidity, allows the water currently present in the masonry to evaporate and enables deep impregnation even on slightly damp materials.

ADVANTAGES

- Do it yourself - quick and easy to apply.
- Long-lasting water repellence.
- Water vapour permeability.
- High resistance to weathering and UV rays;
- Does not alter the colour of the masonry;
- Prevents the formation of efflorescence and mould on the masonry;
- Having a low molecular weight, BKK eco penetrates and makes deep impregnation possible. Impregnations are invisible, extremely lime stable and permeable to water vapour;
- *Solvent free* product.

YIELD

Brick: 0,30 - 0,40 L/m²
Stones: 0,40 - 0,70 L/m²

Brick: 101.86 - 135.82 ft²/gal
Stones: 58.21 - 101.86 ft²/gal

COLOUR

Colourless.

PACKAGING

5 L (1.30 gal U.S.) plastic bucket.
Pallet: 20 boxes (4 pieces each) for the 5L (1.30 gal U.S.) package (total 400 L) (105.60 gal U.S.).

APPLICATION FIELDS

Water-repellent impregnation for mineral-based building materials. Product suitable as a

preventive treatment against carbonation of exposed concrete. Designed to provide colourless water repellent protection for historic buildings or those of particular architectural merit. It can be used to impregnate exposed walls and bricks, natural stone or unglazed ceramic. It is formulated to provide a water-repellent impregnation also for indoor applications on interior walls of bathrooms, shower stalls and kitchens.

STORAGE

Store the product in its original and perfectly closed containers, in well ventilated areas, away from sunlight, rain and frost, at temperature above +5°C (41°F). Storage time 24 months.

PREPARATION OF SUPPORT

The substrate temperature must be between +5°C and +35°C. Clean the surface to be treated thoroughly. The choice of cleaning method depends on the type of substrate; generally, washing with cold water is sufficient. Remove fungi and efflorescence. In the presence of oil or grease, cleaning with hot water or steam is necessary. Do not use detergents. Fill damaged joints with cement-based grout. Due to the large number of bricks and stones on the market and the spectrum of possible applications, it is advisable to always check the visual effect before application).



WATER REPELLENTS

The indications and prescriptions given, while representing our best experience and knowledge, are to be considered indicative and must be confirmed by comprehensive practical applications. Diasen does not know the specificities of the process, let alone the determining characteristics of the application support. Therefore, before using the product, the applicator must in any case carry out preliminary tests, to verify the perfect suitability for the intended use and, in any case, assumes any responsibility that may arise from its use. In case of uncertainties and doubts, please contact the technical office of the company before the start of the work, it being understood that this support is a simple aid for the applicator, which must in any case guarantee the possession of adequate skills and experience for the laying of the product and for the identification of the most appropriate solutions. Always refer to the latest updated version of the data sheet, available on the website www.diasen.com that cancels and replaces each other.

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MIXING

The product is ready to use and does not require mixing. Never add antifreeze products, cement or aggregates.

APPLICATION

1. The best effect is obtained on a dry and absorbent surface.
2. Apply BKK eco by brush or spray, giving a first abundant coat to ensure the total coverage of the surface.
3. Apply a second coat evenly before the first one is completely dry.
4. Continue application until saturated. Generally, 2-3 coats applied about 1 hour apart are sufficient for complete impregnation.

DRYING TIME

At a temperature of 23°C (73.4°F) and relative humidity level of 50%, the product dries in about 4 hours.

- Drying time is influenced by humidity level and temperature and may significantly change.

SUGGESTIONS

- Environmental and support temperature must be between +5°C and +30°C (+41°F and +95°F).
- During summer season, apply the product during the cooler hours of the day, away from sun.
- Do not apply with imminent threat of rain or frost, in conditions of strong fog or with relative humidity higher than 70%.

- Not suitable for waterproofing horizontal surfaces, basements, water basins, plaster surfaces, lift pits or other objects subject to standing or pressurised water.
- *BKK Eco* can be painted over with water-based paints.
- When applied indoor, if the external surface is unplastered and absorbent (i.e. exposed stone/brick), steps should be taken to protect the façade in the longer term. Rilem/Karsten cup tests can be conducted in accordance with EN 16302:2013 to assess the absorptivity of the external surface, following which hygrothermal modelling carried out in accordance with EN 15026 can provide additional insight into whether additional protective measures are needed to reduce absorption. This may be achieved by applying a breathable paint or breathable hydrophobic coating such as *BKK ECO* externally.

CLEANING

Wash tools with spirit (turpentine) before product hardening.

SAFETY

While handling, respect the instructions described in product safety data sheet and always use protective gloves and anti-dust mask.

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* The above data, even if carried out according to standard test methods, are indicative and may be subject to changes to the specific site conditions.

Technical data*

Features		Units
Yield	Brick	0,30 - 0,40 L/m ²
	Stones	0,40 - 0,70 L/m ²
	Brick	101.86 - 135.82 ft ² /gal
	Stones	58.21 - 101.86 ft ² /gal
Aspect	liquid	-
Colour	colourless	-
Odour	none	-
Dilution	do not dilute	
Application temperature	+5 / +30	°C
	+41 / +86	°F
Waiting time between the 1 st and 2 nd layer (T=23°C - 73.4°F; R.H. 50%)	1	hour
Drying time (T=23°C - 73.4°F; R.H. 50%)	4	hours
Storage	12	months
Packaging	5 L plastic bucket	L

** 1680 hours of weathering test is equal to about 10 years. This equivalence is merely indicative and it may vary depending on weather conditions

Final performances*		Units	Regulations	Result
Weathering Test**	1680 hours (10 years *)	hours/years	UNI EN ISO 11507	-
Vapour permeability coefficient (μ)	7	-	-	Highly breathable
Initial average water absorption rate C _{wi,s} (untreated bricks)	0,73	kg/m ² min ⁻¹	UNI EN 772-11	-
Average initial water absorption rate C _{wi,s} (bricks impregnated with BKK eco)	0,00			
Average cold water absorption W _s (untreated bricks)	18,7 + 0,2	%	UNI EN 772-21	-
Average cold water absorption W _s (bricks impregnated with BKK eco)	4,9 + 0,3			



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