



# Epoxy Hydro 2K Graphene

Epoxy water-based 2-component low emission floor paint with graphene



**Covering Power:** 10-12 m<sup>2</sup>/lt



**Drying:** 1 - 2 hours



**Dilution:** 10-15% with water



**Recoatability:** 24 - 48 hours



**Packing:** 900ml, 4L (A+B)

**Application:** Brush, nylon roller


## GENERAL CHARACTERISTICS

Two-component water-based epoxy paint suitable for the protection of concrete floors and metal surfaces for indoor use. It presents excellent resistance to chemicals, great hardness and high resistance to mechanical stress. It offers great coverage, maintenance of the original whiteness, ease of application, anti-slip properties and strong adhesion. Suitable for painting concrete floors in factories, shops, warehouses, workshops, car parks, workshops and in general surfaces with medium-high mechanical and chemical stresses.

The use of graphene in the ready-to-use RAL 7035 and RAL 7040 shades gives the product enhanced mechanical properties, wear resistance, greater elasticity, corrosion resistance and resistance to chemicals. Graphene acts as a structural support grid at the molecular level, which translates into greater durability and therefore, lower maintenance and more significant savings.

## TECHNICAL CHARACTERISTICS

Texture-finish	Satin
Density	Component A: 1,38 ± 0,02 kg/lt Component B: 1,12 ± 0,02 kg/lt Mix A+B: 1,32 ± 0,02 kg/lt
Mixing ratio	4A:1B by weight
Covering power	10 -12 m <sup>2</sup> /lt per coat, depending on floor type
Dilution	10 - 15 % on volume with water
Drying	1-2 hours touch free. The above times are extended under cold and wet conditions.
Recoatability	Recoatable in 24 hours after application and no later than 48 hours.
VOC class	"Two-pack reactive performance coatings. Floor coatings". Type WB. VOC limit =140 gr/lt. Max VOC of product ready for use= 70 gr/lt.
Pot life of mixture	60 min (+10°C), 45 min (+20°C), 30 min (+30°C)
Curing time	2-7 days (+10°C), 1-5 days (+20°C), 12 hours-3 days (+30°C)
Ambient temperature	10°C-30°C
Substrate temperature	10°C-30°C
Relative humidity	<70%
Substrate humidity	<5%
Washability	At least 7 days from its application
Shades	Ready-to-use RAL 7035 and RAL 7040 shades

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VECHRO S.A. Liosion 302, 111 45 Athens <a href="http://www.vechro.gr">www.vechro.gr</a>	
<b>DoP: 10 - CE - PRO EPOXY HYDRO 2K</b>	
<b>EN 1504-2</b> Surface protection product of concrete structures - Coating	
Abrasion resistance (Taber)	Weight loss < 900 mg
Permeability to CO <sub>2</sub>	Sd > 90 m
Permeability to water vapour	Class II
Capillary absorption and permeability to water	W < 0,005 kg/(m <sup>2</sup> .h <sup>0,5</sup> )
Chemical resistance	No defects and reduction Shore hardness < 5%
Impact resistance	Class III (≥ 20 Nm)
Adhesion strength by pull-off	≥ 4,0 N/mm <sup>2</sup>
Dangerous substances	Comply with 5.3
Reaction to fire	Euroclass F



## SURFACE PREPARATION

To ensure proper adhesion of the paint, the surface to be painted must be cleaned of dust, grease, oil, peeling old paint, loose pieces, etc., with a brush or a vacuum cleaner. New surfaces made of concrete or cement mortar must be painted at least one month after their construction. Surfaces painted with one-component paints must be thoroughly cleaned with solvents or mechanical means, while two-component paints and generally smooth surfaces must be thoroughly sanded. Cementitious substrates must be treated by mechanical means to achieve an open porosity surface. Concrete of reduced strength should be removed and surface defects repaired (protruding points, holes, cracks, etc.). EPOXY HYDRO 2K PRIMER is then applied to concrete surfaces or OXIDOL anti-rust primer to new metal surfaces.

## APPLICATION

Before mixing, stir component A mechanically at low speeds. Add component B to component A, dilute 10-15% with water and stir until completely homogenized for 2-3 minutes. The mixing process should be done at the bottom of the package, scraping the sides and bottom of the container to ensure complete mixing. Overmixing should be avoided to minimize air entrapment. Only mix whole packages. After 5-10 minutes we immediately apply a layer of EPOXY HYDRO 2K. Once dry, apply the second layer crosswise.

## CLEANING EQUIPMENT

During the work keep the tools "wet" in the container or vessel with the paint. Drain the paint thoroughly from the tools back into the box and clean them immediately with warm soapy water. Do not empty washing liquids into the water table.

## APPLICATION CONDITIONS

Substrate and ambient temperature should be between 10°C-30°C, substrate humidity less than 5% and relative humidity lower than 70%. Adverse conditions during application can alter the final properties of the paint.

## STORAGE

The product should be stored in its original, sealed packaging, in dry conditions and at temperatures between +5°C and +30°C. Protect the material from frost and sun exposure. Storage time: 1 year in the original, sealed packaging.

## REMARKS

In closed areas, adequate ventilation with fresh air should be ensured to avoid problems during curing of the product film. The gloss of the final product film may vary depending on the temperature, humidity and absorbency of the substrate. If a period of more than 2 days elapses between successive coats, a light sanding of the surface is recommended before applying the next coat. Direct and continuous exposure to solar radiation may result in chalking and discoloration of the product film. At low temperatures and/or high humidity the curing times are prolonged. Protect the surface from rain/water during the curing phase. The substrate temperature should be at least 3°C above the dew point in order to reduce the risk of condensation and bubbling of the product finish.

## SAFETY

Read the label before use. For detailed instructions-precautions consult the safety data sheet of the product

The technical data and instructions included in this technical leaflet are based on audits of confidential laboratories and result of the knowledge and experience of the company's scientific staff. The quality of the product is guaranteed by the company, which is aligned with the requirements of ISO 9001, 14001 and EMAS. As a producer, we are not responsible for any damage or damage caused if the product has not been used for proper application and in accordance with its instructions for use.