

TECHNICAL DATA SHEET

HYDRO CAPFLOOR

Water-dilutable epoxy enamel

CHARACTERISTICS

Two-component, water-dilutable, air-drying, semi-gloss epoxy coating consisting of liquid resins and an amine hardener, with excellent adhesion to mineral surfaces such as concrete, plaster and fibre cement.

Its high quality guarantees ease of application, adhesion and adequate abrasion resistance, performance that ensures a protective film suitable for protecting floors and walls.

The coating, characterised by high mechanical wear resistance and surface hardness, ensures a smooth and uniform surface that is easy to clean and disinfect, with excellent resistance to detergent washing, foot traffic, heavy foot traffic and rubber-wheeled traffic, with an operating temperature range from -20°C to +50°C .

Being odourless, it is particularly suitable for applications in poorly ventilated environments; it is made with raw materials chosen for their low impact, reduced pollution and minimal emissions in order to preserve the well-being and safety of users and people living in the environment.

The product complies with Regulation 852/2004/EC for environments where high standards of hygiene must be maintained or for premises used for the processing and/or storage of food products, in accordance with UNI 11021:2002 and the relevant test reports, in accordance with the HACCP protocol.

USE

Suitable for interior surfaces as a finish or base coat for the protection of new or existing alkaline substrates, such as plasters of various compositions, concrete and fibre cement, including walls and continuous flooring in industrial, residential and social buildings. Ideal for wine cellars, canning factories, slaughterhouses, warehouses and hospitals.

The drying, adhesion and general properties of the enamel are compromised if the substrate moisture content is high, if the ambient and/or substrate temperature is below +10°C , and if the relative humidity exceeds 65%.

Mix the two components thoroughly to obtain a perfectly homogeneous mixture before application. Clean tools with water immediately after use. Maximum resistance to foot traffic is achieved after 7 days of drying at 23°C and 65% RH.

PRODUCT PROPERTIES	VALUE	METHOD
CHEMICAL RESISTANCE		UNI EN ISO 2812-3
Hydrochloric acid 30%	2	
Nitric acid 10%	1	
Sulfuric acid 30%	3	
Ammonia 15%	4	
Soda 50%	4	
Bleach (<5% chlorine) 1:50 in water	3	
Mineral oil, petrol, diesel, vegetable oil	4	
Sodium chloride 20%	4	
Hydrogen peroxide 3.6% (12 vol.)	3	
Water	4	

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	OPERATING TEMPERATURE	< + 120°C		
	SOLIDS BY VOLUME, %	65 ± 2		
	POT LIFE	120 min	Internal PF7	
	DRYING	Can be recoated after 24 hours	Internal PF2	
		Complete 7 days		
	CHEMICAL RESISTANCE, legend			
	0 = complete disintegration of the coating			
	1 = moderate cracking/blistering/swelling, softening and partial detachment			
	2 = softening, pinholes, flaking, slight swelling			
	3 = opacification, colour change, less resistant to mechanical action			
	4 = no alteration of the coating			
SPECIFICATIONS		VALUE	METHOD	
	Specific weight	1300-1500 g/l	Internal PF3	
	Gloss	55 ± 10	Internal PF6	
THICKNESS AND YIELD		Minimum	Max	Recommended
	Dry film thickness, µm	50	80	65
	Wet film thickness, µm	77	123	100
	Theoretical coverage, m²/l	13	8.3	10
	Theoretical coverage, m²/kg	10	6.9	8.3
STORAGE	The product is stable for 6 months if stored in its original containers at a temperature between +5°C °C and +30°C °C.			
COLOUR	White. The range of colours can be chosen from the RAL colour chart. The colour may vary slightly between batches, so it is necessary to finish the job with the same batch.			
SURFACE PREPARATION	The treatment of the surface to be coated is of primary importance and affects the performance of the coating cycle. Good and correct preparation of the substrate is a guarantee of quality and durability of the coating: a high-quality product applied to a poor substrate or to a substrate that has been inadequately treated is destined to wear out prematurely, with possible alteration of the coating itself. For the work to be successful, the surface must be free of previous treatments and cleaned of various types of contaminants such as dirt, oil, grease and salts using industrial alkaline detergents (washing, rinsing and collection of rinse water). It is necessary to carry out a test on approximately 1 m² of the surface to be treated to check the adhesion of the product.			
	New concrete			
	The substrate must be finely finished and cured (100 days), with humidity <5%; it			

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must have a surface free of dust and imperfections; no cement slurry must be visible.

Compressive strength: > 250 kg/cm²

Tensile strength: > 150 kg/cm²

Porosity: treat the substrate with Concrete Capgel descaling agent and after a few minutes rinse thoroughly and carefully, taking care to remove all water. Concrete Capgel can also be used on damp surfaces that have just been cleaned with an alkaline detergent. Once the operation is complete, wait for the surface to dry thoroughly. The enamel can be applied after at least 24 hours, after measuring the floor moisture content, which must be less than 5%.

Alternatively, a porous surface can be created by mechanical abrasion using a shot blasting machine or milling cutter, ensuring that all processing dust is removed (suction).

If cracks are present: widen them with abrasive grinding wheels and fill with epoxy filler mixed with sand.

TOOLS

Roller, spray. Brush (for small surfaces and profiles)

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APPLICATION	Mixing ratio by weight	100:30 with Hydro Capfloor hardener
	Mixing ratio by volume	100:37 with Hydro Capfloor Hardener
	Dilution	As a primer: 25-30% with water; As a finish: 10-15% with water; The dilution varies depending on the porosity of the substrate.
	Pot life at 23°C	As a primer, diluted up to 30%: 45 minutes As a finish with dilution up to 15%: 120 minutes. The product must not be used after the indicated time, even if it appears to be still usable (low viscosity): the properties of the dry product are irreparably compromised (gloss, adhesion, mechanical resistance, chemical resistance, etc.).
	Application conditions	+10°C +40°C Relative humidity: < 65%
	Application method: airless	Nozzle pressure: 15 MPa (150 kp/cm ² , 2100 psi). Nozzle: 0.28 – 0.38 mm (0.011 – 0.018") Fan angle: 40 – 80° Air pressure: Compression ratio 30:1 (pressure 150–180 kg/cm ²)
	Washing thinner	Water immediately after use of the tool

DRYING

The data provided should be considered purely indicative. The actual drying time may be shorter or longer, depending on the film thickness, ventilation and humidity. When overcoating, the best adhesion is obtained when the next coat is applied before the complete catalysis time.

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DFT 65 microns			
Surface temperature	10	23°C	35
Dust-free	60	60	45
Dry to the touch	36	16	10
Complete catalysis	72	24	18
Minimum overcoating time	36	16	12
Maximum overlay time	6 days	5 days	3 days

RECOMMENDED SYSTEM

Flooring for processing warehouses, logistics and storage areas/ Public or private underground car parks – pigmented system – for interiors

Product	Layers	Wet thickness (µm)	Dry thickness (µm)
Hydro Capfloor	1	77	50
Hydro Capfloor	1	100	65
Hydro Capfloor	1	100	65
Total	3	277	180

POSSIBLE SYSTEMS

Flooring for public, residential and commercial buildings/ Sports flooring – pigmented system – also for outdoor use

Product	Layers	Wet thickness (µm)	Dry thickness (µm)
Hydro Capfloor	1	77	50
Hydro Capfloor	1	100	65
Hydro Pur 70/Hydro Pur 71	1	90	45
Total	3	267	160

WARNINGS

To perform the work properly, it is essential to follow the instructions contained in the CAP Arreghini technical data sheets. The specification data have been determined at +23°C s with 65% relative humidity and with the thicknesses indicated. Under different conditions, the data and the times between one operation and another may vary. The technical information provided is indicative. Due to the wide variety of substrates and application conditions, it is recommended to check the suitability of the product for the intended use and its effectiveness by carrying out tests on the specific application.