

2K, satin, high-performance epoxy enamel for concrete and industrial flooring. Product with CE Marking



General information

System: Two pack - 2K Nature: Solvent-based Packages: 4 kg, 20 kg

Tinting Service: Can be colored with solvent-based colorants Unisol Pro Series 0200

Suitable Substrates: Cement

Color fans and color cards: Ral 841 GL

Technical features

2K satin epoxy enamel, specifically formulated for concrete and industrial flooring as a dustproof solution, featuring excellent abrasion resistance, strong adhesion to substrates, and high surface hardness. Surfaces treated with Pavidam become impermeable to oils, gasoline, detergents, grease, and mildly acidic or basic solutions. Pavidam provides quick drying times and excellent workability. The product has CE marking for applications with low-performance requirements in buildings and civil engineering works, as well as for applications subject to fire reaction regulations, in compliance with the harmonized standard UNI EN 1504-2:2005.

Application field

Epoxy enamel suitable for coating industrial flooring and concrete surfaces in general, such as warehouses, garages, workshops, food-processing plants, and mechanical industries. Pavidam is ideal for applications requiring high surface hardness, mechanical and abrasion resistance, and excellent filling capacity.

SUBSTRATE PREPARATION

- New floor: to perform the work to the state-of-the-art, it is necessary to check the absorption of the substrate pouring water on it in order to verify the sufficient porosity level of the surface to be treated. If the water is rapidly absorbed, the support is in excellent conditions to be coated. Otherwise, it is not porous enough and it must be chemically treated as follows: wash the floor with a mixture of 1 part of muriatic acid to 9 parts of water and after the reaction of the acid, rinse well with water. When the floor is completely dry, proceed coating it.
- Painted floor: old paint, non-compliant and friable layers must be removed mechanically. Oils, greases, and rubber residue must be
 removed in advance using a suitable solvent or detergent.

APPLICATION

Application conditions

• Floor: It is recommended to apply with a short-nap roller for enamels. To ensure the homogeneity of the product with the catalyst, please follow these instructions: pour the catalyst, Component B, into the base, Component A, mix thoroughly, and dilute the product according to the technical data sheet instructions. In cases where the cementitious surface requires the use of a suitable primer, it is recommended to apply a preliminary coat of solvent-based impregnating fixative as indicated in the flooring range.

EQUIPMENT	VISCOSITY	NOOZLE	PRESSURE	NOTES
ROLLER	-	-	-	Dilution for roller application: 1st coat at 20% with Epoxy Thinner Series D0021; 2nd coat at 15% with Epoxy Thinner Series D0021

CATALYSIS

SERIES	HARDENER	CATALYSIS	USE	POT LIFE AT 20°C	PACKAGE
L0075	HARDENER ES8	15% by weight (100 + 15)	For flooring	4 hours	0.6 kg, 3 kg, 4 kg



ENVIRONMENTAL CONDITIONS

Environment temperature 12°C - 35°C

Substrate temperature 12°C - 35°C

2 years in original sealed containers, intact and protected from frost and excessive heat at a temperature not lower than +5°C and not higher than +30°C.

TECHNICAL DATA

Theoretical average spreading rate	4 m²/kg each coat at the dry film thickness of 100 μ	Application	Roller	Dilution	1st coat at 15-20% with Epoxy Thinner D0021 - 2nd coat at 10% with Epoxy Thinner D0021
Gloss	50 - 60 gloss	Wet film thickness each coat	<i>170</i> µ	Dry film thickness each coat	<i>100</i> µ
N° of coats	2 coats to achieve the total requested thickness	Total dry film thickness	200 µ	Theoretical average consumption	242 g/m²

DRYING

Overcoating interval	6 - 8 hours	Air drying	20°C	Dust-free drying	40 minutes
Dry to touch	2 - 3 hours	Dry through	24 - 36 hours	Full cure	28 days
Flash off	-	Stoving drying	-	Resistance to temperature	80°C in continuous

WARNINGS AND RECOMMENDATIONS

- •In accordance with the law and in order to satisfy all local and national directives, it is mandatory to send the customer the MSDS of the product and apply on the packaging the legal label to be printed using the Formulab tinting software.
- •To verify the color consistency in 2K epoxy systems, the hardening and dilution of the product are recommended prior to evaluation.
- Shelf Life Component B: the shelf life of the hardener used with Component A is 24 months.
- •The product is sensitive to direct exposure to UV rays, therefore in the event of exposure, chalking and yellowing can occur, without compromising the performance of the system.
- •The product must be applied at ambient temperature above 12°C. Likewise, the painted product must remain stationary for the following 8-14 hours at a temperature close to 12°C/15°C in order to ensure perfect crosslinking.
- •On cementitious support, it is recommended to create the color with colorants Series 0200 suitable for alkali resistance. To obtain the best color uniformity, it is recommended to mix the binder and the colorants with a cowless disperser.
- •When oil resistance is required, wait at least 10 days after the application before the cured film comes into contact with them.
- After having dispensed the colorants in the binder, it is recommended to proceed quickly with mixing in order to avoid problems of color homogeneity.
- •Satin epoxy enamel can be used in the construction sector for painting floors if some fundamental precautions are observed: the cementitious substrate must be perfectly cured (over 2 months), washed with water, dry, free of old single-component synthetic paints, and free of any loose parts. Additionally, given the possibility of saponification reactions, which can lead to detachment, it is recommended to apply a coat of solvent-based impregnating primer Ancor-fix Series 8231, as provided in the Damiani flooring range.
- •It is recommended to carry out practical tests, such as spreading or applying the colored product on small surfaces made of suitable material, before proceeding with the product painting.
- •Do not apply the product with floor temperatures below +12°C. Check for the presence of moisture in the substrate: it must not exceed 4%. Before applying any coating, it is advisable to carry out the "plastic sheet" test, according to Standard ASTM D 4263-83, to check for any problem caused by excessive rising moisture and/or counter-thrust water.



WARNINGS AND RECOMMENDATIONS

- •Walkability parameters and overcoating interval for applications on cementitious floors: at 12°C walkable in 3 days and complete film hardening after 12 days; at 20°C walkable in 2 days complete film hardening after 8 days; at 30°C walkable in 2 days and complete film hardening after 6 days. In order to obtain such performances, the coatings must be applied in compliance with the application intervals defined according to the temperature: at 12°C the interval between the first and second coat must be 24 hours; at 20°C the interval must be 8 hours; at 30°C, the interval must be 6 hours.
- •The floor must have a minimum compressive strength of 25 N/mm² and tensile strength of 1,5 N/mm².
- Especially as final coat, it is always advisable to use materials of the same production batch; different production batches of the same colour can have light differences.
- For floors subject to the parking of vehicles with new tires, it is recommended to carry out a preliminary test to exclude the formation of stains caused by the tire blend. The phenomenon is more evident with light colors.
- Apply the second coat after 6 8 hours at a temperature of 20°C.
- •Full chemical resistance is achieved, at 20°C 30°C, after 10-15 days.
- •The system is partially resistant to aromatic and strong solvents (ketones) and to highly acid or alkali materials.
- •The product is suitable for cementitious floors as an anti-dust, "thin film thickness" system.
- •To achieve an anti-skid effect in compliance with Ministerial Decree 236-89 Ref. B.C.R., add component A with 5% of Antiskid additive Series 0851; mixing must be carried out with an electric stirrer with motor speed of 300-400 rpm. Then catalyse the product as indicated in the technical data sheet.

WALKABILITY AND VEHICLE ACCESSIBILITY

TEMPERATURE °C	OVER-COATABLE AFTER	WALKABLE AFTER	VEHICLE ACCESSIBLE AFTER
+ 12 °C	24 hours	3 days	10 days
+ 20 °C	8 hours	2 days	7 days
+ 30 °C	6 hours	2 days	6 days

SUPPLY TECHNICAL DATA

Composition	Epoxy polyamide	by weight	77 ± 2%	Voc	365 ± 2 g/l	
Reference color	White	% solid content by volume	60 ± 2%	Vos	23.6 ± 2%	

% solid content

	VISCOSITY	SPECIFIC WEIGHT	GLOSS
TEST METHOD	ISCOL 1	ISCOL 2	ISCOL 6
DATA	4000 - 6000 mPa.s (20°C) Rod 4 Speed 20	1.48 - 1.58 g/ml	50 - 60 gloss 60°

MIXING RATIO A+B

Specific weight		% solid content by weight (a+b)	75 ± 2%	 Voc (a+b)	363 ± 2 g/l	
after catalysis (a+b)	1.42 ± 0.05 g/ml	0/ colid contont				
		% solid content by volume (a+b)	59 ± 2%	Vos (a+b)	25.5 ± 2%	

L0075

A+B BY WEIGHT	100 + 15
A+B BY VOLUME	100 + 25



TINTING SERVICE

BASE	BASE PACKAGING	COLORED PACKAGING	% MIXING RATIO
DINDED	3.4 kg	4 kg	
BINDER	17 kg	20 kg	05 - 15

CERTIFICATIONS

CE

EC Marking

Surface protection systems for concrete



BCRA Determination of slipperiness

Slip resistance test - British Ceramic Research Association method Ministeria Decree n. 236 dtd 14th June 1989 BCRA reference method

NOTES

Cleaning tools:

At the end of the application, carefully clean the tools (spray guns, painting systems/plants, containers) with a specific thinner suitable for the product. Store all equipment once the drying period is complete.

Sanitary labelling:

Handle the products with care and always consult the material safety data sheets in order to comply with current safety and environmental regulations.

Additional notes:

- •The information reported in this technical data sheet is obtained through the exclusive use of Damiani products (paints, hardeners, thinners) applied according to the indicated specifications. The use of products from other companies in mixed coating systems with Damiani products can compromise the performance of the applied coating system. By virtue of this, the company does not guarantee the final result.
- •The times related to pot life and drying intervals refer to a standard temperature of 20°C, except when it is expressly indicated.
- •Please note that the degree of gloss indicated and tested may vary during the application phase as it can be influenced by the following factors: color achieved, thicknesses applied, coats applied, environmental conditions, thinner used, hardeners other than that established in the technical data sheet.
- •The spreading rates are theoretical, indicative and intended per coat as they can be influenced by the color and the application system. Practical application test is suggested.
- Pot Life times have been defined at the temperature of 20°C, therefore higher or lower temperatures, hardeners, environmental conditions and humidity different from the standard can influence in defect or in excess the duration of the Pot Life.

All the data of the document have been verified and can be considered reliable. The responsibility for the use of the product to be applied remains with the user in compliance with what is indicated in the technical data sheet. Any use of the product that differs from what is indicated in the technical data sheet concerning the parameters of preparation of the product, of the substrate, of drying and applications or that is outside the provisions of the recommended coating systems and of the preparations of suitable surfaces, must be considered attributable to the user and therefore exempts the manufacturer from any and all liability and/or guarantee. The user must in any case check and verify the suitability of the selected products according to the specific, intended use. For any information regarding the coating system, the application conditions and the technical features of the products, it is advisable to contact the technical assistance service of the Damiani laboratory. It should be noted that the packaging image could have a placeholder purpose and could therefore constitute an indicative reference. The packages indicated may vary according to the additions or changes of the annual price lists. This document replaces all previous versions. In any case, to better understand the parameters of the technical data sheet, it is advisable to refer to the annexes of the explanatory notes. The updated version of the following technical data sheet available in the specific section on the website www.color-damiani.com is to be considered the only one binding.

ESTALIA Performance Coatings Spa

Plant: Via San Rocco, 10/1/A - 42027 - Montecchio Emilia - Reggio Emilia - Tel. +39 0522 11 709 - www.color-damiani.com Headquarter: Via Giacomo Matteotti, 160 - 25014 - Castenedolo - Brescia - Italia - Tel. +39 030 21 35 55 - www.estaliacoatings.com