

WATERPUR SATIN DTM

Series 0242

2K, DTM, satin finish, water-based, polyacrylic enamel



General information

System: Two pack - 2K

Nature: Water-based

Packages: 20 kg

Tinting Service: Can be colored with Acquaplast 0400 Series water-based colorants

Suitable Substrates: Iron, Cast iron, Galvanized surfaces, Sandblasted Iron - Sandblasting Sa 1-2, Sandblasted Iron - Sandblasting Sa 2,5-3

Color cards: Ral 841 GL

Technical features

DTM, polyacrylic primer and final coat for indoor and outdoor application. The product is characterized by excellent flow, sagging stability, surface hardness, good anticorrosion properties, fast drying and outdoor resistance.

Application field

2K, water-based enamel suitable to be used also as DTM primer and final coat for the protection of metal manufactured products (iron and cast iron castings) when excellent sagging stability, fast drying, hardening and good anticorrosive properties are requested. The product is suitable as satin finish final coat for metal carpentry, agricultural machinery and manufactured items when excellent resistances to atmospheric agents, bad weather and mechanical stress are required. It can also be used as a pigmented, anti-dust final coat for outdoor concrete floors guaranteeing good walkability. The product is not suitable for floors with trolley and forklift constant traffic.

SUBSTRATE PREPARATION

The pre-treatment phase of the surfaces to be carried out prior to the application of the coating system is to be considered as the decisive phase to guarantee the effectiveness of the performance of the coating products. In fact, before applying the coatings it is necessary to optimally clean the surface, making it suitable for the application of the coating system. It is also recommended that the surface must be dry, clean, degreased and free of rust, as well as any loose parts of old paint. In any case, and where strictly necessary and for the purposes of carrying out a workmanlike operation, it is advisable to contact technical assistance or to consult the explanatory notes attached to the technical data sheet. These annexes indicate the different types of pre-treatment by virtue of the surface to be treated and subsequently painted. Among the main methods are listed those which have more or less influence, depending on the state of the support and the final result to be achieved. In the document are listed both surface activities such as degreasing, manual cleaning and mechanical purification with appropriate equipment, operations such as scraping, sanding, tapping, brushing, and more "invasive" procedures such as light or accurate sandblasting, shot blasting, shot peening and wet sandblasting (or hydro sandblasting). In case of particularly difficult substrates, such as bright galvanized steel, stainless steel, carry out a preventive mechanical preparation treatment such as mild sandblasting, sanding and/or brushing.

APPLICATION

Application conditions

The application of the product can be influenced by environmental conditions (including humidity and temperature), by the conformation of the product to be treated and by the thicknesses to be applied. It is necessary to pay particular attention to the type of application system as the different layouts and the different structural conditions of the application systems can affect the final result in a variable manner depending on the case and intervene on fundamental technical parameters such as: the transfer efficiency of the coating product, the overspray, the aesthetic appearance obtained, the sagging stability of the product and the ease or complexity of application. In this regard, it is advisable to contact the technical assistance department, when requested, to carry out the necessary surveys and consultancy in the event that applications on complex structures are to be carried out.

EQUIPMENT	VISCOSITY	NOOZLE	PRESSURE	NOTES
AIRBRUSH - CUP GUN	25" - 35" Ford Cup 4	1.4 - 1.7 mm	3.5 - 4 bar	-
AIRMIX	Depending on the application criteria	11 - 13	60 - 100 bar	-
ROLLER	-	-	-	Dilution 5-10% with tap water

WATERPUR SATIN DTM

Series 0242

CATALYSIS

SERIES	HARDENER	CATALYSIS	USE	POT LIFE AT 20°C	PACKAGE
L0073	HARDENER PW7	20% by weight (100 + 20) or 4 : 1 by volume	Non yellowing for water-based polyacrylics	1 hour	1 kg - 4 kg - 20 kg

ENVIRONMENTAL CONDITIONS

Environment temperature	10°C - 35°C	Substrate temperature	10°C - 35°C
Relative humidity	60 %	Shelf life	1 year 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	7.2 m ² /kg each coat at the dry film thickness of 50 µ	Application	Spray, Roller	Dilution	5-10% with tap water
Gloss	40 - 50 gloss	Wet film thickness each coat	104 µ	Dry film thickness each coat	50 µ
N° of coats	1 or 2 coats till reaching the total, suitable thickness	Total dry film thickness	70 µ	Theoretical average consumption	135 g/m ²

DRYING

Overcoating interval	1 - 24 hours	Air drying	20°C- 25°C	Dust-free drying	40 - 60 minutes
Dry to touch	2 - 3 hours	Dry through	2 days	Full cure	7 days
Flash off	15 - 20 minutes at 20°C	Stoving Drying	30 - 40 minutes at 60°C	Resistance to temperature	80°C

WARNINGS AND RECOMMENDATIONS

- The degree of gloss is influenced by the thickness applied and the intensity of the chosen color. The higher is the satin finish, the lower is the resistance to polishing.
- To achieve a uniform finish obtaining a constant degree of satin finish/opacification, apply the product in several light coats, trying to maintain a regular application.
- The product is sensitive to frost. Do not expose to low temperature conditions.
- To increase the resistance of the film to water, it is advisable to respect fundamental factors during the application phase including: relative humidity not exceeding 60% and strictly adhere to the thicknesses indicated in the technical data sheet.
- In cases of manual application, to obtain a correct homogenization of component A Waterpur polyacrylic line and component B, it is recommended to proceed with careful mechanical stirring. In cases of application with automatic premixing systems, use water only and exclusively in component A. Since component B is sensitive to water, it must absolutely not come into contact with it and must be stored in dry containers. The presence of humidity can generate thickening of component B to the point of making it no longer usable. To wash the hardener circuit, use the special Damiani washing thinner. Do not use water. The same thinner can also be used for cleaning the entire painting system.
- The application of high thicknesses in a single coat can generate pitting phenomena with consequent aesthetic and performance defects. The product also polymerizes at room temperature. To obtain the maximum chemical and mechanical resistance, it is recommended to dry for 30-40' at 50-60°C.
- The accuracy of the color must be evaluated when the product is completely dried.
- After having dispensed the colorants in the binder component, it is recommended to proceed quickly with mixing in order to avoid problems of color homogeneity.
- 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.
- When saturated and bright colors are selected for direct to metal products (reds, oranges, yellows) it is necessary to apply two coats of 100 µ w.f.t. of the product to check the color match.
- Shelf Life Component B: the shelf life of the hardener used with Component A is 6 months.
- For thickness higher than 80-100 µ, several coats are to be applied in order to avoid popping phenomena (gasification and pin points).
- The product is suitable for new and already coated, but smooth cementitious floors. For the preparation of the substrate, which must be perfectly cured (over 4 months), it is necessary to sand or smooth the surface, remove the old, 1K paints and any eventual flaking or peeling parts from the floor. If it is not possible to carry out the treatment described above, accurately wash the floor with an acid solution consisting of 1 part of muriatic acid and 9 parts of water, leave it to act until complete reaction and rinse thoroughly with water. Before painting, wait for the complete drying. For the cleaning and routine maintenance, it is recommended to use suitable detergents and always carry out a preventive test to check the compatibility of the detergent with the coating.
- To obtain an anti-skid effect in compliance add component A with 5% of Antiskid Additive Series 0851; the mixing must be carried out with an electric stirrer with motor speed at 300-400 rpm. Then catalyse the product following the instructions of the technical data sheet.
- For the catalysis by volume and the relative dilution, contact the technical assistance.
- In case of particularly difficult substrates, such as bright galvanized steel, stainless steel, carry out a preventive mechanical preparation treatment such as mild sandblasting, sanding and/or brushing.

SUPPLY TECHNICAL DATA

Composition	Acrylic Polyurethane	% solid content by weight	59 ± 2%	Voc	82 ± 2 g/l
Reference color	White	% solid content by volume	44 ± 2%	Vos	6 ± 2%
SPECIFIC WEIGHT		VISCOSITY		PH	
TEST METHOD		ISCOL 1		ISCOL 11	
ISCOL 2		ISCOL 1		ISCOL 11	
DATA		1.05 - 1.25 g/ml		7.5 - 7.6 pH	
		1000 - 1500 mPa.s (20°C) Rod 3 Speed 20		40 - 50 gloss 60°	

WATERPUR SATIN DTM

Series 0242

MIXING RATIO A+B

Specific weight
after catalysis
(a+b)

1.31 ± 0.05 g/ml

% solid content
by weight (a+b) 60 ± 2%

% solid content
by volume (a+b) 47 ± 2%

Voc (a+b) 138 ± 2 g/l

Vos (a+b) 10 ± 2%

L0073

A+B BY WEIGHT 100 + 20

A+B BY VOLUME 4 : 1

TINTING SERVICE

BASE	BASE PACKAGING	COLORED PACKAGING	% MIXING RATIO
BINDER	16 kg	20 kg	80 - 20
WHITE BASE	19 kg	20 kg	95 - 5

NOTES

Cleaning tools:

At the end of the work, be sure to thoroughly clean the tools (spray guns, painting systems, containers) with tap water. As the product is water-based and fast drying, if washing with water is not sufficiently effective, proceed with a final washing using a limited quantity of suitable solvent in order to remove the product from the equipment used.

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 data relating to the A+B mixing ratio section are to be considered with reference only to the first recommended hardener.
- 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