ELASTOCOLOR PITTURA ZERO

Indoor and outdoor crack-bridging, anti-carbonation elastomeric paint, resistant to moulds and algae, with offset CO_2 emissions through the entire life cycle

CO_2 FULLY OFFSET PRODUCTS

Elastocolor Pittura Zero is part of the CO_2 Fully Offset in the Entire Life Cycle line of products. CO_2 emissions measured throughout the life cycle of products from the Zero line in 2024 using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of certified carbon credits in support of forestry protection projects. A commitment to the planet, to people and to biodiversity. For more details on how emissions are calculated and on climate mitigation projects financed through certified carbon credits, visit the webpage **zero.mapei.com**.

WHERE TO USE

Painting façades with cracks and concrete structures subject to deformation, including those particularly exposed to the damaging action (or "deterioration") of algae, moulds and fungi, to provide substrates with long-lasting protection against such forms of microorganism.

Some application examples

- Protecting concrete structures subject to small deformations when under load against carbonation.
- Protecting and decorating render with micro-cracks, including when already painted.
- Painting façades subject to the aggression of biological agents (e.g. north-facing façades) or already deteriorated by moulds and algae.

TECHNICAL CHARACTERISTICS

Elastocolor Pittura Zero is a one-component, acrylic resin-based elastomeric paint in water dispersion, with fully offset greenhouse gas emissions.
Once completely dry, **Elastocolor Pittura Zero** forms an elastic coat that remains impermeable to water and aggressive atmospheric agents (CO_2 - SO_2) while remaining permeable to vapour.
Elastocolor Pittura Zero has excellent resistance to ageing, freezing weather and de-icing salts and makes it very difficult for dirt to remain attached to the surface.
Elastocolor Pittura Zero complies with the principles defined in EN 1504-9 (“Products and systems for the protection and repair of concrete structures: definitions, requirements, quality control and evaluation of conformity. *General principles for the use of products and systems*”), and the requirements of EN 1504-2 (“Surface protection systems for concrete”): surface protection against ingress, moisture control and increasing resistivity (principles: *PI - MC – IR*).
Elastocolor Pittura Zero is particularly resistant to the growth of algae, mould and fungi. It may be used to paint walls that have already been affected by such microorganisms after removing them and cleaning the

surface, or to prevent them forming by painting buildings (and structures) in areas where the particularly damp climate encourages their growth.
Elastocolor Pittura Zero contains a product specifically formulated to control the growth of mould and algae. **Elastocolor Pittura Zero**, used in combination with **Silancolor Primer Plus** or **Silancolor Base Coat Plus** and, where necessary, with **Silancolor Cleaner Plus**, forms a complete protection system against biological aggression and provides a defence for surfaces which remains durable over the years.
Apart from protecting substrates, **Elastocolor Pittura Zero**, forms an attractive finish and is available in a wide range of colours, obtained using the ColorMap® automatic tinting system.

ADVANTAGES AND BENEFITS

- Permanent elasticity
- Anti-carbonation
- Crack-bridging
- Protection against moulds and algae

RECOMMENDATIONS

- Do not use **Elastocolor Pittura Zero** for waterproofing horizontal surfaces, such as roofs and terraces.
- Do not use **Elastocolor Pittura Zero** for waterproofing surfaces constantly immersed in water, such as basins, depurators and channels.
- Do not apply **Elastocolor Pittura Zero** on surfaces open to foot traffic.
- Do not use **Elastocolor Pittura Zero** for painting de-humidifying render.
- Do not apply **Elastocolor Pittura Zero** on damp substrates or on substrates which are not fully cured.
- Do not apply directly on surfaces where algae, mould or fungi have already formed. Remove them beforehand using **Silancolor Cleaner Plus**.
- Do not apply **Elastocolor Pittura Zero** at temperatures lower than +5°C or higher than +35°C.
- Do not apply **Elastocolor Pittura Zero** if the level of humidity is higher than 85%.
- Do not apply **Elastocolor Pittura Zero** if it is about to rain, in windy weather or if there is direct sunlight.

APPLICATION PROCEDURE

Preparation of the substrate

New surfaces requiring treatment, or areas patched up with repair mortar, must be well cured, perfectly clean, compact and dry.
Remove all traces of oil and grease and parts which are not well bonded to the surface.
Remove all traces of algae, mould and fungi, if already formed. Removal must be carried out when the surface is wet, after thoroughly washing the surface with **Silancolor Cleaner Plus**.
Silancolor Cleaner Plus must be applied on the whole surface using a low-pressure hand spray pump or a brush, leaving the product to react for a few minutes and letting it penetrate deep in the substrate. Then remove algae, moulds and fungi mechanically by brushing. Repeat application more than once and continuously apply **Silancolor Cleaner Plus**, allowing it to penetrate deep in the substrate. Seal any cracks if present and repair damaged areas before application. Fill pores in concrete and level off irregularities on the substrate using mortars and skimcoats from MAPEI Building Line.
Carry out the suitable treatment on the dry and cured substrate depending on specific needs:
under normal conditions, use the transparent primer **Malech**. In case of poor coverage paints, use **Quarzolite Base Coat** pigmented primer.
In case of already contaminated surfaces or surfaces that are particularly exposed to the aggression of mould and algae, use **Silancolor Primer Plus** hygienizing primer or, in case of poor coverage paints, the pigmented hygienizing base coat **Silancolor Base Coat Plus**.
On surfaces where the curing cycle used is unsure, or which are crumbling or have low absorbency, use transparent solvent-based primer **Elastocolor Primer** for the preliminary treatment. The primed surface must not appear shiny (no glassy film must form on the substrate).

Preparation of the product

Dilute **Elastocolor Pittura Zero** with 10÷15% of water and mix using a drill at low-speed until completely blended. For the preparation of partial quantities, it is recommended to accurately stir **Elastocolor Pittura Zero**, as it is, before pouring the material from the original container.

Application of the product

Apply **Elastocolor Pittura Zero** using traditional techniques: by brush, roller or spray over the dry coat of specified primer.
When applying the product by brush or roller, at least 2 coats are required to get good cover. Wait 12-24 hours between each coat, depending on the level of humidity and surrounding temperature, and always wait until the previous coat is completely dry.

CLEANING

Brushes, rollers and spray equipment (airless) may be cleaned with water before **Elastocolor Pittura Zero** dries.

CONSUMPTION

Coverage is highly depending on the roughness and porosity of the substrate and on the type of tool used for the application. Under normal conditions the consumption rate is around 0.2-0.4 kg/m^2 per coat.

PACKAGING

Elastocolor Pittura Zero is supplied in 20 kg recycled plastic drums.

STORAGE

24 months in a dry place away from sources of heat at a temperature of between +5°C and +30°C. Protect from frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet available from our website www.mapei.co.uk
PRODUCT FOR PROFESSIONAL USE.

TECHINCAL DATA (typical values)

**Product cerified according to standard EN 1504-2 (“surface protection systems for concrete")
Principles: PI - MC – IR (coating for protection against the risk of penetration, moisture control and increase in resistivity).
VVCP systems: 2+ and 3 (for fire reaction).**

PRODUCT IDENTITY	
Consistency:	thick liquid
Colour:	white, colour chart, or various colours using the ColorMap® automatic tinting system
Density (EN ISO 2811-1):	approx. 1.37 g/cm^3
Dry solids content by weight (EN ISO 3251):	approx. 63%

APPLICATION DATA	
Dilution rate:	10-15% of water
Waiting time between coats:	12-24 hours according to humidity and temperature conditions, and in all cases only when the previous coat is completely dry
Application temperature:	from +5°C to +35°C

Consumption:	0.2-0.4 kg/m² (per coat)

FINAL PERFORMANCE

VOC content of ready-mixed product (white) (European Directive 2004/42/EC):	≤ 15 g/l
VOC content of ready-mixed product (coloured) (European Directive 2004/42/EC):	≤ 20 g/l
Resistance to accelerated ageing (colour RAL 7032) after 1,000 hours exposure to a Weather-Ometer (ASTM G 155 cycle 1):	ΔE < 2.5

RESISTANCE TO BIOLOGICAL AGGRESSION

Resistance to mould and fungi (EN 15457):	no growth
Resistance to algae (EN 15458):	no growth

PERFORMANCE CHARACTERISTICS FOR CE MARKING ACCORDING TO EN 1504-2

STANDARD	TEST	RESULTS AND COMPLIANCE WITH REQUIREMENTS	
EN ISO 2409	Cross-cut test	result/class:	GT1, compliant (≤ GT2)
EN 1062-6	permeability to CO_2	μ: s_D: dry thickness according to$_D$: result/class:	1.272.581 318 m 0.00025 m compliant (s_D > 50 m)
EN ISO 7783	permeability to water vapour	μ: s_D: dry thickness according to$_D$: result/class:	2193 0.5 m 0.00025 m compliant (s_D < 5 m)
EN 1062-3	capillary absorption and permeability to water	w: result/class:	0.01 kg/(m²h$^{0.5}$) compliant (w < 0.1)
EN 1062-11 4.1	thermal compatibility: ageing: 7 days at +70°C	result/class:	compliant (adherence ≥ 0.8 N/mm²)
EN 13687-1	thermal compatibility: freeze-thaw cycling with de-icing salt immersion	result/class:	compliant (adherence ≥ 0.8 N/mm²)
EN 13687-2	thermal compatibility: thunder-shower cycling	result/class:	compliant (adherence ≥ 0.8 N/mm²)
EN 13687-3	thermal compatibility: thermal cycles without immersion in de-icing salts	result/class:	compliant (adherence ≥ 0.8 N/mm²)
EN 1062-7 (static)	resistance to cracking	crack bridging ability: result/class:	1600 μm A4 (> 1.25 mm)
EN 1062-7 (dynamic)	resistance to cracking	result/class:	class B2
EN 1542	bond strength by pull-off	result/class:	compliant (adherence ≥ 0.8 N/mm²)
EN 13501-1	reaction to fire	euroclass	B s1 d0

EN 1062-11:2002 4.2	exposure to artificial atmospheric agents	result/class:	compliant

OTHER PERFORMANCE CHARACTERISTICS			
STANDARD	TEST	RESULTS	
EN 7928	ion chloride diffusion	penetration:	0.0 millimeters
EN ISO 2812-1	chemical resistance to ammonium ion	result/class:	no visible defect

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application.
The values declared in the TECHNICAL DATA table (typical values) were obtained in compliance with test methods and curing cycles defined in the technical standards referenced therein. Therefore, please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.
Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.co.uk

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