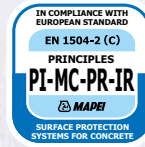




Elastocolor Pittura Plus

Elastomeric hygienic paint
with crack-bridging ability



LONG LASTING ELASTICITY

MOULD AND ALGAE RESISTANT

WHERE TO USE

Painting façades with cracks and concrete structures subject to deformation, including those particularly exposed to the deterioration action of algae, mould 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 and plaster with micro-cracks with a seamless elastic coat, including render and plaster already painted.
- Painting thin prefabricated structures subject to cracking.
- Painting façades damaged by algae and mould.
- Painting north-facing façades.

TECHNICAL CHARACTERISTICS

Elastocolor Pittura Plus is a one-component acrylic resin-based paint in water dispersion that forms a film on the surface through the action of natural light sources.

Once completely dry, **Elastocolor Pittura Plus** forms an elastic coat that remains impermeable to water and aggressive atmospheric agents (CO_2 - SO_2) while remaining permeable to vapour.



Elastocolor Pittura Plus has excellent resistance to ageing, freezing weather conditions and de-icing salts. Its photo-chemical film-forming process gives the painted surface an excellent dirt pick-up resistance.

Elastocolor Pittura Plus 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 conformity assessment. General principles for the use and application of systems"*), and the requirements of EN 1504-2 (*"Protection systems for concrete surfaces"*) for class: products for protecting surfaces - coating (C) - protection against the risk of penetration (1.3) (protection against ingress, PI) (ZA.1d) + control of humidity (2.2) (moisture control, MC) and increase in resistivity (8.2) (increasing resistivity, IR) (ZA.1e) + physical resistance (5.1) (resistance in physical, PR) (ZA.1f).

Elastocolor Pittura Plus is particularly resistant to the growth of algae, mould and fungus. It may be used to paint walls that have already been damaged 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 Plus contains a special anti-mould and anti-alga product.

Elastocolor Pittura Plus 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 Plus**, forms an attractive finish and is available in a wide range of colours, obtained using the **ColorMap®** automatic colouring system.

RECOMMENDATIONS

- Do not use **Elastocolor Pittura Plus** for waterproofing horizontal surfaces, such as terraces.
- Do not use **Elastocolor Pittura Plus** for waterproofing surfaces constantly immersed in water, such as basins, depurators and channels.
- Do not dilute **Elastocolor Pittura Plus** with solvent.
- Do not apply **Elastocolor Pittura Plus** on surfaces open to foot traffic.
- Do not use **Elastocolor Pittura Plus** for painting de-humidifying render.
- Do not apply **Elastocolor Pittura Plus** 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 beforehand with **Silancolor Cleaner Plus** and **Silancolor Primer Plus** before applying **Elastocolor Pittura Plus**.

- Do not apply **Elastocolor Pittura Plus** if the temperature is lower than +5°C or higher than +35°C (the surface must always be dry and must never be in direct sunlight).
- Do not apply **Elastocolor Pittura Plus** if the level of humidity is higher than 85%.
- Do not apply **Elastocolor Pittura Plus** if it is about to rain or in windy weather.
- Please refer to the "Safety instructions for preparation and application" section for further information.

APPLICATION PROCEDURE

Substrate preparation

The surface must be perfectly clean and solid, previously treated with a primer suitable for the situation and needs. Under normal conditions, use the transparent primer **Malech** or, in the case of colours with low hiding power, the pigmented primer **Quarzolite Base Coat**. On surfaces that are already contaminated or particularly exposed to mould and algae, use the transparent, hygienising primer **Silancolor Primer Plus** or, in the case of low coverage colours, the pigmented, hygienising undercoat **Silancolor Base Coat Plus**.

On surfaces where the curing cycle used is unsure, or which are crumbling or have low absorbency, use **Elastocolor Primer** for the preliminary treatment. The primed surface must never be "shiny".

Elastocolor Pittura Plus must only be applied on dry primer.

Before applying the specified primer, repair any damaged or deteriorated areas of the concrete with controlled-shrinkage, fibre-reinforced mortar from the **Mapegrout** or **Planitop** lines.

Existing algae, mould and fungi must be removed while damp, that is after washing the surface with **Silancolor Cleaner Plus**. Completely remove all traces of dirt, dust, grease, oil and saline efflorescence that could affect adherence of **Elastocolor Pittura Plus** to the substrate.

On old surfaces the choice of the cleaning cycle to use depends on the type of dirt; washing with cold water is generally sufficient. Cleaning the surface with hot water or steam is particularly recommended for oil or grease stains.

Sand-blasting may also be used. If there is no dirt on the surface, it may simply be brushed down with a stiff brush and then blown with compressed air to remove the dust.

Elastocolor Pittura Plus may be applied on render, plaster and concrete with capillary cracks, including if widespread, without any particular preparation.

TECHNICAL DATA (typical values)

Conforms to the following standards:

- products certified according to EN 1504-2 (Surface protection systems for concrete), 2+ and 3 system
- class according to EN 1504-2: surface protection products - coating - protection against ingress (1.3) (ZA.1d) + moisture control (2.2) and increasing resistivity (8.2) (ZA.1e) + physical resistance (5.1) (ZA.1f) (C, principles PI - MC - IR - PR)

PRODUCT IDENTITY

Consistency:

thick liquid

Colour:

white, from the MAPEI colour chart range or in various colours obtained using the **ColorMap®** automatic tinting system

Density (EN ISO 2811-1) (g/cm³):

approx. 1.37

Dry solids content by weight (EN ISO 3251) (%):

approx. 63

APPLICATION DATA

Dilution rate:

10-15% of water

Re-coat time:

12-24 hours according to humidity and temperature and, in any case, only when the previous layer is completely dry

Application temperature:

+5°C to +35°C

Consumption (kg/m²):

0.2-0.4 (per coat)

FINAL PERFORMANCE

VOC content of ready-mixed product (white) (European Directive 2004/42/EC) (g/l):

≤ 20

VOC content of ready-mixed product (coloured) (European Directive 2004/42/EC) (g/l):

≤ 30

Resistance to accelerated aging (colour RAL 7032) after 1,000 hours exposure to a Weather-Ometer (ASTM G 155 cycle 1):

ΔE < 2.5

RESISTANCE TO BIOLOGICAL ATTACK (P.R.A. test report)

Resistance after 28 days to mould and fungi (EN 15457) :

no growth

Resistance after 35 days to alga (EN 15458):

no growth

Check for larger cracks and, depending on the depth, provide suitable sealing and, if necessary, levelling with **Elastocolor Rasante** or **Elastocolor Rasante SF** reinforced with **Elastocolor Net**.

Preparation of the product

Dilute **Elastocolor Pittura Plus** with 10-15% of water and mix using a drill at low-speed until completely blended.

When preparing only partial quantities, we recommend mixing undiluted **Elastocolor Pittura Plus** before pouring the required quantity off the original bucket.

Application of the product

Apply **Elastocolor Pittura Plus** by brush, roller or spray on the dry coat specified primer. When applying the product by brush or roller, at least 2 coats are required to obtain a complete and effective coverage. Wait 12-24 hours between each coat according to humidity and temperature conditions, and in any case, only when the previous layer is completely dry.

Maintenance after application

Elastocolor Pittura Plus may be washed with water and detergent (carry out a preliminary test beforehand as there are numerous products available on the market).

Cleaning

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

CONSUMPTION

Consumption is heavily influenced by the absorption and roughness of the substrate, by the colour of the paint applied and according to the application technique used. At standard conditions consumption rate is generally about 0.2-0.4 kg/m² (per coat).

PACKAGING

Elastocolor Pittura Plus is supplied in 20 kg plastic buckets.

STORAGE

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

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.com.

PRODUCT FOR PROFESSIONAL USE.

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. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.



All relevant references for the product are available upon request and from www.mapei.com

PERFORMANCE CHARACTERISTICS FOR CE CERTIFICATION ACCORDING TO EN 1504-2, SYSTEMS 2+ AND 3 - CLASS ZA.1d + ZA.1e + ZA.1f (C, principles PI - MC - IR - PR)

STANDARD	TEST	RESULTS AND COMPLIANCE WITH REQUIREMENTS	
EN ISO 2409	oblique shear	result/class:	GT1, compliant (\leq GT2)
EN 1062-6	permeability to CO ₂	μ :	1,272,581
		s_0 (m):	318
		dry thickness according to s_0 (m):	0.00025
		result/class:	compliant ($s_0 > 50$ m)
EN ISO 7783	permeability to water vapour	μ :	2193
		s_0 (m):	0.5
		dry thickness according to s_0 (m):	0.00025
		result/class:	I ($s_0 < 5$ m)
EN 1062-3	capillary absorption and permeability to water	w [kg/(m ² h ^{0.5})]:	0.01
		result/class:	compliant (w < 0.1)
EN 1062-11 4.1	thermal compatibility: ageing: 7 days at +70°C	result/class:	compliant (adherence \geq 0.8 N/mm ²)
EN 13687-1	thermal compatibility: freeze-thaw cycles with immersion in de-icing salts	result/class:	compliant (adherence \geq 0.8 N/mm ²)
EN 13687-2	thermal compatibility: thunder-shower	result/class:	compliant (adherence \geq 0.8 N/mm ²)
EN 13687-3	thermal compatibility: thermal cycles without immersion in de-icing salts	result/class:	compliant (adherence \geq 0.8 N/mm ²)
EN 1062-7 (static)	resistance to cracking	crack-bridging ability (μ m):	1600
		result/class:	A4 (> 1.25 mm)
EN 1062-7 (dynamic)	resistance to cracking	result/class:	B2
EN 1542	direct tensile adherence test	result/class:	compliant (adherence \geq 0.8 N/mm ²)
EN 13501-1	reaction to fire	euroclass:	B s1, d0
EN 1062-11:2002 4.2	exposure to artificial atmospheric agents	result/class:	compliant
EN ISO 5470-1	resistance to abrasion	result/class:	compliant (Δ weight < 3000 mg)
EN ISO 6272-1	impact strength	result/class:	class III (\geq 20 Nm)

ADDITIONAL PERFORMANCE CHARACTERISTICS

STANDARD	TEST	RESULTS AND COMPLIANCE WITH REQUIREMENTS	
UNI 7928	diffusion of chloride ions	penetration (mm):	0.0
EN ISO 2812-1 - NH ₄ ⁺	resistance to chemicals	result/class:	compliant

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