



# MAPEI

# Elastocolor Paint

## Elastomeric paint for crack-bridging protection



### LONG LASTING ELASTICITY

### HIGH CHEMICAL RESISTANCE

#### WHERE TO USE

Painting cracked façades and concrete structures subject to deformation.

#### Some application examples

- Protecting concrete structures subject to small deformations when under load against carbonatation.
- Protecting and decorating render with micro-cracks, including render already painted, with a continuous flexible layer.
- Protecting thin, pre-fabricated structures subject to cracking.

#### TECHNICAL CHARACTERISTICS

**Elastocolor Paint** is a single component acrylic resin-based paint in water dispersion which forms a film on the surface due to the action of natural light. Once completely dry, **Elastocolor Paint** forms a flexible finishing coat which is impermeable to water and aggressive agents in the atmosphere (CO<sub>2</sub> - SO<sub>2</sub>), while remaining permeable to vapour.

**Elastocolor Paint** has excellent resistance to ageing, freezing weather conditions and de-icing salts, and the photo-chemical film which forms makes it very difficult for dirt to remain attached to the surface.

**Elastocolor Paint** meets the main requirements of EN 1504-9 (*"Products and systems for protecting and repairing 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 – coatings (coating, C) - protection against the risk of penetration (1.3) (protection against ingress, PI) (ZA.1d) + control of humidity (2.2) (moisture



TECHNICAL DATA (typical values)	
Conforms to the following standards: <ul style="list-style-type: none"> <li>- products certified according to EN 1504-2 (Surface protection systems for concrete), 2+ and 3 compliance certification system</li> <li>- classes according to EN 1504-2: products for protecting surfaces - coating - protection against the risk of penetration (1.3) (ZA.1d) + control of humidity (2.2) and increase in resistivity (8.2) (ZA.1e) (C, PI-MC-IR principles)</li> </ul>	
PRODUCT IDENTITY	
Consistency:	thick liquid
Colour:	white, from the MAPEI colour chart range or in various colours obtained using the <b>ColorMap®</b> automatic colouring system
Density (EN ISO 2811-1) (g/cm <sup>3</sup> ):	approx. 1.37
Dry solids content (EN ISO 3251) (%):	approx. 63
Brookfield Viscosity (mPa·s):	approx. 16,000 (rotor 6 - 20 rpm)
APPLICATION DATA	
Dilution rate:	10-15% of water
Waiting time between each coat:	at least 24 hours under normal humidity and temperature conditions, and in all cases, when the previous layer is completely dry
Application temperature range:	from +5°C to +35°C
Consumption (kg/m <sup>2</sup> ):	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 ageing colour RAL 7032, 1,000 hours exposure to a Weather-Ometer (ASTM G 155 Standard, cycle 1):	ΔE < 2.5

control, MC), and increase in resistivity (8.2) (increasing resistivity, IR) (ZA.1e).

#### RECOMMENDATIONS

- Do not use **Elastocolor Paint** for waterproofing horizontal surfaces, such as terraces (use **Aquaflex**).
- Do not use **Elastocolor Paint** for waterproofing surfaces which will be constantly immersed in water, such as basins, depurators and channels.
- Do not dilute **Elastocolor Paint** with solvents.
- Do not apply **Elastocolor Paint** on surfaces subject to foot traffic.
- Do not use **Elastocolor Paint** for painting de-humidifying render.
- Do not apply **Elastocolor Paint** on damp substrates, or on substrates which are not fully cured.
- Do not apply **Elastocolor Paint** 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 Paint** if the humidity level is higher than 85%.
- Do not apply **Elastocolor Paint** if rain is imminent or in windy weather.
- Please refer to the "Safety instructions for preparation and application" section.

#### APPLICATION PROCEDURE

##### Preparation of the substrate

Surfaces to be protected with **Elastocolor Paint** must be perfectly clean and solid and must be treated beforehand with **Malech** or, if colours with poor covering properties are used, with **Quarzolite Base Coat**. On surfaces where the type of curing cycle used is unsure, or if they are crumbly or have low absorbency, use **Elastocolor Primer** for the preliminary treatment cycle. The primed

surface must never be “shiny”.

Before applying the primer coat, repair any areas in concrete which are in poor condition with controlled-shrinkage, fibre-reinforced mortar from the **Mapegrout** or **Planitop** ranges of products.

Completely remove all traces of dirt, dust, grease, oil, paintwork, saline efflorescence, mould and moss which could impede **Elastocolor Paint** from penetrating into the substrate.

When choosing which cleaning cycle to use, on old surfaces it depends on the type of dirt, but cold water is usually sufficient.

Cleaning the surface with hot water or steam is particularly recommended if oil or grease is present.

Sand-blasting may also be used. If the surface is not dirty, the surface may simply be brushed down with a stiff brush and blown with compressed air to remove the dust.

**Elastocolor Paint** may be applied on render and concrete with capillary cracks, even if they are widespread, without carrying out any special preparation operations.

Deeper cracks, or those wider than 0.2 mm, must be opened with a grinder and sealed with **Mapeflex AC4** before applying **Elastocolor Paint**.

With cracks wider than 0.5 mm, apart from opening and sealing them with **Mapeflex AC4**, we recommend smoothing over the surface with **Elastocolor Rasante** or **Elastocolor Rasante SF** reinforced with **Elastocolor Net** before applying **Elastocolor Paint**.

**Elastocolor Paint** must only be applied on dry primer.

#### Preparation of the product

Dilute **Elastocolor Paint** with 10-15% of water and mix using a low-speed drill until it is completely blended.

When preparing only partial quantities, we recommend mixing **Elastocolor Paint** as is in its original container before pouring off the quantity required.

#### Application of the product

**Elastocolor Paint** may be applied using traditional application techniques: by brush, roller or spray on the coat of primer.

For effective, complete covering of the surface, apply at least two coats. Under normal humidity and temperature conditions, wait 24 hours between each coat, and in all cases, only when the previous coat is completely dry.

Use the airless system when applied by spray, after applying the first coat with a brush or roller.

Examples of the final effect and finishes obtained using **Elastocolor Paint** are illustrated in the “MAPEI colours in Design” catalogue.

#### Maintenance after application

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

#### Cleaning

Brushes, rollers and spraying equipment may be cleaned with water before **Elastocolor Paint** dries.

#### CONSUMPTION

Consumption is heavily influenced by the absorption and roughness of the substrate, the colour of paint applied and according to the application technique used. Under normal conditions, consumption is generally 0.2-0.4 kg/m<sup>2</sup> per coat.

#### PACKAGING

**Elastocolor Paint** is supplied in 20 kg plastic drums.

#### STORAGE

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

#### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Elastocolor Paint** is not considered hazardous according to current norms and regulations regarding the classification of mixtures. However, we recommend the use of protective gloves and goggles, and to take the usual precautions for handling chemical products. If product is applied in a closed area, make sure that it is well ventilated. For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

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](http://www.mapei.com)**



**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**



## PERFORMANCE CHARACTERISTICS FOR CE CERTIFICATION ACCORDING TO EN 1504-2, 2+ AND 3 COMPLIANCE CERTIFICATION SYSTEM CLASSES ZA.1d + ZA.1e (C, PI - MC - IR principles)

STANDARD	TEST	RESULTS AND CONFORMITY TO REQUIREMENTS	
EN ISO 2409	oblique cut	result/class:	GT1, in conformity ( $\leq$ GT2)
EN 1062-6	permeability to CO <sub>2</sub>	$\mu$ :	1,272,581
		$s_D$ (m):	318
		dry thickness according to $s_D$ (m):	0.00025
		result/class:	in conformity ( $s_D > 50$ m)
EN ISO 7783	permeability to water vapour	$\mu$ :	2193
		$s_D$ (m):	0.5
		dry thickness according to $s_D$ (m):	0.00025
		result/class:	I ( $s_D < 5$ m)
EN 1062-3	capillary absorption and permeability to water	w [kg/(m <sup>2</sup> h <sup>0.5</sup> )]:	0.01
		result/class:	in conformity (w < 0.1)
EN 1062-11 4.1	thermal compatibility: ageing: 7 days at +70°C	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
EN 13687-1	thermal compatibility: freeze-thaw cycles with immersion in de-icing salts	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
EN 13687-2	thermal compatibility: thunder-shower	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
EN 13687-3	thermal compatibility: thermal cycles without immersion in de-icing salts	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
static EN 1062-7	crack resistance	crack-bridging ability ( $\mu$ m):	1333
		result/class:	A4 (> 1.25 mm)
dynamic EN 1062-7	crack resistance	result/class:	B2
EN 1542	direct traction adherence test	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
EN 13501-1	reaction to fire	euroclass:	B s1 d0
EN 13036-4	resistance to skid marks	result/class:	II (dry internal surface) (> 40 dry units)
EN 1062-11:2002 4.2	artificial exposure to atmospheric agents	result/class:	in conformity
EN 1081	anti-static behaviour	result/class:	I (electrical resistance > 10 <sup>4</sup> and < 10 <sup>6</sup> Ω)
	hazardous substances	result/class:	in conformity

## FURTHER PERFORMANCE CHARACTERISTICS ACCORDING TO EN 1504-2 REGARDING REQUIREMENTS FOR CLASSES ZA.1d + ZA.1e

STANDARD	TEST	RESULTS AND CONFORMITY TO REQUIREMENTS	
EN ISO 5470-1	abrasion resistance	result/class:	in conformity ( $\Delta$ weight < 3000 mg)
EN ISO 6272-1	impact resistance	result/class:	class III ( $\geq$ 20 Nm)
UNI 7928	diffusion of chloride ions	penetration (mm):	0.0
EN ISO 2812-1 - NH <sub>4</sub> <sup>+</sup>	chemical resistance	result/class:	in conformity



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