



MAXSHEEN[®]

ELASTIC PHOTOACTIVE



ENVIRONMENTAL PRODUCT DECLARATION

PHOTOCATALYTIC AND DECONTAMINATING ELASTIC COATING FOR INDOOR AND OUTDOOR ANTI- CARBONATION PROTECTION

DESCRIPTION

MAXSHEEN[®] ELASTIC PHOTOACTIVE is an acrylic-based, photocatalytic, decontaminating and self-cleaning coating with high elastic and waterproof performance. It is specifically designed for the photocatalytic protection and long-lasting decoration of facades and exterior and interior applications on common construction substrates, such as concrete, brick, plaster, etc.

APPLICATION FIELDS

- Coating of facades and exterior surfaces, developing a photocatalytic, decontaminating and self-cleaning performance if exposed to natural light.
- Coating of interior walls in tunnels, developing the photocatalytic properties due to exposure to artificial UV light sources.
- Protection of concrete against carbonation, freeze-thaw cycles, marine environment and other aggressive weathering conditions.
- Waterproofing against rainwater on facades in general with a decorative finish.
- Waterproofing and coating of fissures in façades.

ADVANTAGES

- High decontaminating effect due to photocatalysis performance. Reduces and neutralizes the harmful effect by CO₂, NO_x, SO_x.
- Provides a self-cleaning surface, reducing cleaning and maintenance costs of treated surfaces.
- Water-based formula, free of Volatile Organic Compounds (VOCs). Environmentally friendly: Non-toxic and non-flammable.

- Antibacterial properties, eliminates environmental pathogens (viruses, bacteria, etc.).
- Suitable for application on ceilings and walls, on interior and exterior surfaces.
- Excellent protection against carbonation of concrete. Very high resistance to CO₂ penetration, preventing corrosion of rebars caused by carbonation process
- Permeable to water vapour, it does not form a water vapour barrier.
- Long lasting and high weathering resistance.
- Its high elasticity allows it to bridge micro-cracks and withstand the thermal expansion of the substrate over a wide range of temperatures.
- Very high adhesion on common construction substrates.
- Resistant to stains and dirt
- High colour stability and UV resistant.
- High resistance to saponification on cement-based substrates.
- Fast curing, depending on ambient temperature and humidity.

APPLICATION INSTRUCTIONS

Surface preparation

Surface must be structurally sound, firm, without cement laitance and as uniform as possible, and preferably with a slight roughness, i.e. open textured surface. It must be clean, free of paints, efflorescence, loose particles, grease, oils, curing agents, form release agents, dust, organic growth or any other contaminants that may affect to adhesion. For cleaning and substrate preparation, preferably in case of the smooth and/or poorly absorbent substrates, use preferably sand blasting or high-pressure water cleaning methods, not being desirable aggressive mechanical means.

All surface defects, voids, honeycombs and static cracks without movement, once opened and routed to a minimum depth of 2 cm, must be repaired with **MAXREST®** (Technical Bulletin No. 2). Rebars and other metal elements exposed during the substrate preparation should be cleaned and passivated with **MAXREST® PASSIVE** (Technical Bulletin No. 12).

On porous or absorptive substrates, gypsum and chalky or dusty surfaces, should be primed with **MAXSHEEN® PRIMER** (Technical Bulletin No. 150) to seal pores and obtain a more cohesive and homogeneous surface.

Expansion joints and cracks subject to movement, once routed and cleaned, must be sealed with a suitable elastomeric sealant from the **MAXFLEX** range.

Application

MAXSHEEN® ELASTIC PHOTOACTIVE is supplied ready to use. Before application, stir the content of the packaging to get a homogeneous paste and colour uniformity. **MAXSHEEN® ELASTIC PHOTOACTIVE** can be applied by brush, roller or mechanically by air-less gun. In that last case, dilute it with the minimum amount of water which allows the product application.

Concrete, masonry, render, asbestos cement and stone. Apply two coats. The first coat should be diluted in the ratio 5:1 of **MAXSHEEN® ELASTIC PHOTOACTIVE** and water. This coat is applied as a primer and once it is tack-free, 2-3 hours depending on the ambient conditions, apply the second coat of pure **MAXSHEEN® ELASTIC PHOTOACTIVE**.

Plaster substrates, high porosity and absorption substrates and powdery surfaces. It is recommended to apply a primer coat of **MAXSHEEN® PRIMER** (Technical Bulletin No. 150) to seal the pores and provide a homogeneous and cohesive surface. Next, apply two pure coats of **MAXSHEEN® ELASTIC PHOTOACTIVE**.

Active cracks/fissures and joints subject to movements. Once these are routed and cleaned, fill them with a suitable sealant such as **MAXFLEX® 100 W** (Technical Bulletin No. 337) or **MAXJOINT ELASTIC** (Technical Bulletin No. 156) and let to cure for 3 days. Then apply a first thick coat of **MAXSHEEN® ELASTIC PHOTOACTIVE** with 0,3 kg/m² and spread a strip of **DRIZORO® VEIL G-45** (6-8cm wide) ensuring to be totally embedded. Once it is dry, apply a second coat of pure **MAXSHEEN® ELASTIC PHOTOACTIVE** with similar consumption.

Application conditions

Do not apply when rain, contact with water, condensation, dampness, and dew is expected within the first 24 h. Do not apply with substrate or ambient temperature is at or below 5°C, or when are expected to fall below 5°C within 24 h. Do not apply to frozen or frost-covered surfaces.

Cleaning

All tools and equipment must be cleaned immediately with water after use. Once product cures, this can only be removed by mechanical means.

CONSUMPTION

Consumption for **MAXSHEEN® ELASTIC PHOTOACTIVE** is 0,2-0,3 kg/m² per coat, i.e. total 0,4-0,6 kg/m².

These figures are for guidance and may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on-site to ascertain the total consumption exactly

IMPORTANT INDICATIONS

- **MAXSHEEN® ELASTIC PHOTOACTIVE** should be applied to dry or slightly damp surfaces and avoid contact with water for at least 24 hours after application.
- Do not apply on enamelled or vitrified substrates and surfaces with water repellent agents.
- Do not apply on icy or frosty surfaces. Do not apply at room temperature below 5°C.
- Allow new concrete and mortars a curing time of 28 days before application.
- Observe the recommended consumption per coat.
- Do not add solvents, thinners, additives, aggregates, or other compounds.
- **MAXSHEEN® ELASTIC PHOTOACTIVE** is not suitable for permanent contact with water.
- For other uses not specified in this Technical Bulletin or further information, consult the Technical Department

PACKAGING

MAXSHEEN® ELASTIC PHOTOACTIVE It is supplied in 25 kg drums.

It is available in white colour with a smooth finish.

STORAGE

Twenty-four months in its unopened packaging. Store in a cool, dry, and covered place, protected from moisture, freezing and direct sunlight, at temperatures above 5°C.

SAFETY AND HEALTH

MAXSHEEN® ELASTIC PHOTOACTIVE is non-toxic, but skin and eye contact must be avoided. Safety goggles and protective gloves should be used

during the application. In case of skin contact, wash affected areas with soap and water. In case of eye contact rinse thoroughly with clean water but do not rub. If irritation continues, seek medical attention.

Consult **MAXSHEEN® ELASTIC PHOTOACTIVE** Safety Data Sheet.

Disposal of the product and its packaging must be carried out in accordance with current legislation and is the responsibility of the final user of the product.

TECHNICAL DATA

Product characteristics	
CE Marking, EN 1504-2	
Description. Coating for protection of concrete. Coating (C). Principles / Methods. Protection against ingress with coating (Principle 1-PI/1.3), Moisture control with coating (Principle 2-MC/2.2) and Increasing resistivity by limiting moisture content with coating (Principle 8-IR/8.2)	
General appearance and colour	One-component homogeneous paste
Application and curing conditions	
Minimum application temperature for substrate and ambient, (°C)	> 5
Waiting time between coats at 20°C & 50 % R.H., (h)	2-3
Cured product characteristics	
NOx removal, UNE 127197-1 (%)	42,0 (Class 3)
Permeability to water vapour, EN ISO 7783-1/-2. Classification	Class I: Permeable to water vapour
Transmission rate, V (g/m ² ·d)	26,9
Thickness of equivalent air layer, S _D (m)	0,8
Coefficient, μ	2.594
Permeability to water and capillary absorption, EN 1062-3. w (kg/m ² ·h ^{0,5})	< 0,1
Permeability to CO ₂ , H. Klöpfer method.	
Permeability (g/m ² ·d)	4,5
Diffusion resistance Index (μ)	174661
Thickness of equivalent air layer, S _D (m) / d _{CO2} (m/s)	695 (recommendation S _D >50 m) / 0,022·10 ⁻⁶
Pull-off test, EN 1542 (MPa)	1,8
Consumption*	
Consumption per coat/total application, (kg/m ²)	0,2-0,3 / 0,4-0,6

* This figure is for guidance only and may vary depending on porosity, texture and conditions for substrate, and application method. Perform a preliminary test on-site to ascertain the total consumption exactly under jobsite conditions.

GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO®, S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. To know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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