

#### WHERE TO USE

Colourless protection against rain for exposed concrete structures, cement renders, cellular cement, facebricks, exposed concrete blocks, natural and artificial stone, non-glazed ceramic tiles, etc.

#### Some application examples

- Repair of plastered walls exposed to rain.
- Preventive treatment of exposed concrete against carbonation.
- Colourless water-repellent protection of historic buildings or those of special architectural value.
- Water-repellent treatment of walls and facebricks.

### **TECHNICAL CHARACTERISTICS**

**Antipluviol S** is a colourless liquid made from silanes and siloxanes in solvent, characterised by its capacity to penetrate deeply into all absorbent mineral-based materials used in the building industry.

Applied to a porous surface, **Antipluviol S** penetrates deeply and reacts with natural humidity to form a water-repellent layer inside pores and capillaries.

Without altering appearance, **Antipluviol S** provides efficient protection against aggressive atmospheric agents that penetrate structures. The **Antipluviol S** water repellent treatment also improves the

self-cleaning effect of facades and reduces the adhesion of moss and weeds.

**Antipluviol S** does not form a skin and, therefore, does not substantially modify permeability to water vapour.

**Antipluviol S** has excellent resistance to the alkalis present in cementitious materials and to UV rays and maintains its water-repellent properties for a very long time.

Antipluviol S 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 – hydrophobing impregnation, H) – protection against the risk of penetration (1.1) (protection against ingress, PI) + control of humidity (2.1) (moisture control, MC) and increase in resistivity (8.1) (increasing resistivity, IR) (ZA.1a).

#### **RECOMMENDATIONS**

Impregnation with **Antipluviol S** is unsuitable for waterproofing:

horizontal surfaces (terraces);

# Antipluviol S



Applying Antipluviol S by brush

## TECHNICAL DATA (typical values)

Conforms to the following standards:

- product certified according to EN 1504-2 standards (Surface protection systems for concrete), 2+ compliance certification system;
- class according to EN 1504-2: products for protecting surfaces hydrophobing impregnation protection against the risk of penetration (1.1) + control of humidity (2.1) and increase in resistivity (8.1) (ZA.1a) (H, PI MC IR principles)

PRODUCT IDENTITY		
Consistency:	liquid	
Colour:	transparent	
Density (EN ISO 2811-1) (g/cm³):	approx. 0.80	
Active substance content (%):	9	
Brookfield Viscosity (mPa·s):	approx 5 (rotor 1 - 50 rpm)	
APPLICATION DATA		
Surface drying time:	1 hour	
Application temperature range:	from +5°C to +30°C	

# PERFORMANCE CHARACTERISTICS FOR EN 1504-2 CE CERTIFICATION, COMPLIANCE CERTIFICATION SYSTEM 2+ - CLASS ZA.1a (H, PI - MC – IR PRINCIPLES)

STANDARD	TEST	RESULTS AND CONFORMITY	
UNI EN 1504-2 requirements, table 3, n. 19	penetration depth	penetration (mm):	4
		result/class:	I (< 10 mm)
UNI EN 13580 water absorption and resistance to alkalis		absorption ratio compared with untreated surface (%):	2.6
	water charaction and	result/class:	in conformity (< 7.5%)
		absorption ratio compared with untreated surface after immersion in alkali (%):	6.6
		result/class:	in conformity (< 10%)
UNI EN 13579	drying speed for hygrophobing impregnation	drying speed coefficient (%):	> 30
		result/class:	I (> 30%)
UNI EN 13581 loss in mass after freeze cycles with de-icing sal		No. of cycles for treated surface:	> 50
	loss in mass after freeze-thaw	No. of cycles for untreated surface:	9
	cycles with de-icing saits	Δ cycles treated - untreated:	> 41
		result/class:	in conformity (Δ cycles > 20)
	hazardous substance	result/class:	in conformity

- basements;
- water tanks;
- lift wells and areas subject to water under pressure;
- walls subject to rising damp carrying salts;
- gypsum surfaces;
- synthetic plasters and surfaces decorated with synthetic paint.

Carry out a preliminary test to ensure no colour changes take place on the substrate when **Antipluviol S** is to be used on natural stones, coloured renders or on other types of substrates which show no uniform absorbency.

## **DIRECTIONS FOR USE Preparing the substrate**

Before application, it is essential to remove all dirt, dust, grease, oil, paint, salt laitance, moss and weeds from the surface that might prevent **Antipluviol S** from penetrating deeply.

For old surfaces, the choice of the cleaning system will depend on the kind of dirt involved. Washing with cold water is generally sufficient.

Cleaning with hot water or steam is particularly useful if there is grease or oil on the surface.

If there is no surface dirt, scrub carefully with a scrubbing brush and remove dust with compressed air.

Whichever cleaning operation employed, **Antipluviol S** must always be applied on dry surfaces.

#### **Preparing the product**

**Antipluviol S** is ready to use and should not be thinned with solvents or water.

#### **Applying the product**

The efficacy and durability of **Antipluviol S**'s water-repellent action depends on the depth of penetration of the primer, which itself depends on the porosity of the material being treated and the quantity of primer applied.

To apply **Antipluviol S** evenly, it is advisable to use a manual shoulder-mounted sprayer for large surfaces and a roller or brush for smaller surfaces or for walls with many windows.

Apply the product until saturation point by applying one coat after another while still wet.

Once **Antipluviol S** has been applied, the surface cannot be painted. Any painting must therefore be done beforehand using inorganic paints (silicate paint, for example). In any case, tests should be

done to assess any possible changes in colour.

## Precautions to be taken during preparation and application

- Do not apply **Antipluviol S** if there is the likelihood of impending rain.
- Apply the product at a temperature between +5°C and +30°C.
- Do not apply if the humidity level is higher than 85%.

#### **Cleaning**

Tools used for impregnation can be cleaned with solvents (petrol, white spirit, and so on).

#### **CONSUMPTION**

Coverage varies according to the absorbent power of the substrate in general:

concrete: 0.15-0.50 kg/m² per coat cement render: 0.25-0.80 kg/m² per coat facebricks: 0.30-1.00 kg/m² per coat 0.10-0.80 kg/m² per coat 0.10-0.80 kg/m² per coat

#### **PACKAGING**

**Antipluviol S** is available in 5 and 10 kg drums.

#### **STORAGE**

Store **Antipluviol S** in closed packaging in a dry place indoors, well away from flames and sources of heat.

# SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

**Antipluviol S** contains harmful, flammable solvents which are dangerous to aquatic organisms.

It is therefore mandatory to wear protective gloves and goggles during application and to take all the usual precautions for working with flammable products: do not smoke and avoid working in the presence

Facebricks treated with Antipluviol S







of flames or sparks. Ensure there is adequate ventilation when working in a closed environment. Work clothes with primer spilt on them must be changed immediately.

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.

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

