

# **I-PROTECT AS**

### BREATHABLE WATER AND OIL RESISTANT IMPREGNATION SEALER FOR BUILDING SURFACES FIELDS OF APPLICATION

- PREVENTS INGRESS OF WATER, OIL AND SOLVENTS
- IT HAS A GOOD RESISTANCE TO GRAFFITI
- WILL NOT CHANGE THE APPEARANCE OF THE TREATED SURFACE
- ALLOWS THE SURFACE TO BREATHE
- CONTAINS ZERO V.O.C.
- CAN BE USED ON VERTICAL AND HORIZONTAL SURFACES/ INDOORS AND OUTDOORS
- B.B.A APPROVED AND CE MARKED
- WARRANTY\*: 15 YEARS ON VERTICAL SURFACES AND 10 YEARS ON HORIZONTAL SURFACES

\* Warranty is granted by the manufacturer after delivery of the technical documentation and compliance with the requirements contained in the: www.ibixbiocare.it

#### **PRODUCT DESCRIPTION**

#### **I-PROTECT AS**

- Offers effective protection against all weather conditions, dirt, dust and stains.
- Significantly reduces the adhesion of chewing gums, which can be easily removed from floors treated with **I-PROTECT AS**.
- It offers excellent graffiti resistance, avoiding the absorption of paints in the support allowing it to be removed with ecological BIO REMOVER, VEGEGRAF by IBIX BIOCARE. After removal, hydrophobic protection is preserved.
- Reduces surface degradation by avoiding the adhesion of atmospheric contaminants to treated support. A surface treated with **I-PROTECT AS** will remain moisture vapour permeable.
- Resists moss and lichen formation.
- Offers excellent protection against urine by facilitating stain removal.
- It helps to reduce ordinary maintenance on the treated surface and its costs.
- Will prevent surfaces from deteriorating through repeated "Freeze/Thaw" cycles.
- Keeping masonry dry, contributes to maintaining better performance of packages or thermal insulation application cycles.
- It does not alter the aesthetic of the treated surface (invisible protection) or change its colour. Resistant to UV rays. It is not flammable. It's not toxic. It's environmentally friendly.
- Easy to apply to any surface and you can use the surface within 1 hour of application.
- It has a high penetration capacity of approx. 10mm. Factor that leads him to be classified in Class I among hydrophobic sealers (BS EN 1504-2)
- Suitable for ground surfaces with high levels of foot traffic.

#### **TECHNICAL FEATURES**

**I-PROTECT AS** is a non-film forming oleo-hydrophobic colourless liquid based on aqueous fluoro-polymers. It has high penetration capacity on all the absorbent mineral materials used in construction (natural and artificial stone materials, exposed face reinforced concrete, plasters and mineral paints), creating a strong chemical bond with the support, which makes it extremely long-lasting.

**I-PROTECT AS** creates a hydrophobic surface within the pores and cavities of the treated material, capable of repelling water, while maintaining almost unchanged the water vapour permeability of the support. **I-PROTECT AS** is not film forming coating, allowing the material to "breathe" and ensure greater durability over time.

In accordance with recent international regulations and in respect with the environment, **I-PROTECT AS** is an environmentally friendly and non-polluting product, totally exempt from VOC (VOC 0.00).

Thanks to the chemical characteristics of the fluoro-polymer, **I-PROTECT AS** is UV resistant and it has an excellent resistance to alkalinity present in cement-based materials while maintaining its hydrorepellence characteristics over time .

For these properties, **I-PROTECT AS** offers great protection against aggressive agents in the atmosphere, conveyed through stormwaters (from rains).

**I-PROTECT AS** meets the principles defined in EN 1504-9 standard ("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 standard ("Surface protection systems for concrete surface") for the class: surface protection products - hydrophobic impregnation (hydrophobing impregnation, H) - protection against penetration risks (1.1) (I-PROTECT AS ion against ingress, PI) + humidity control (2.1) (moisture control, MC) and increased resistivity (8.1) (increasing resistivity, IR) (ZA.1a).

- Chemical Composition: Aqueous fluoropolymer dispersion
- Density: 1.0kg/lt @ 25°C
- Flashpoint: > 55°C
- Chemical Resistance: mild acids and alkalis, and water
- Coverage: Dependant on porosity
- VOC Content: 0.0g/litre

#### **TECHNICAL FEATURES**

Complies with the standards:

- Product certified according to EN 1504-2 ("Surface protection systems for concrete"), 2+ compliance attestation system;
- Class of membership according to EN 1504-2: surface protection products hydrophobic impregnation protection against penetration risks (1.1) + moisture control (2.1) and increased resistivity (8.1) (ZA.1a) (H, PI Principles - MC - IR)
- Chemical Composition: Aqueous fluoropolymer dispersion
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Physical state:	liquid	
Colour	Transparent	
Customs tariff:	38249070	
APPLICATION DATA:		
Superficial drying time:	4 hours	
Application temperature - environment:	+5°C to 35°C.	
Application temperature - substrate:	+5°C to 35°C.	
Substrate relative humidity	Max. 5%	

## PERFORMANCE CHARACTERISTICS FOR CE CERTIFICATION ACCORDING TO EN 1504-2, CONFORMITY ATTESTATION SYSTEM 2+, ZA.1a CLASS (H, PI - MC - IR Principles)

STANDARD	TEST	RESULTS AND COMPLIANCE WITH REQUIREMENTS	
UNI EN 1504-2	Depth of penetration	depth of penetration	5.6 mm
table 3, n. 19		result/class:	CLASS 1 < 10 mm
UNI EN 13580 Alkali		Absorption rate compared to untreated substrate (%):	6.9 % [D & E]
	result/class:	compliant < 7.5%	
		Absorption rate compared to untreated substrate after immersion in alkalis(%):	8.9 % [D & F]
		result/class:	compliant < 10.0%

UNI EN 135791	DRYING SPEED FOR HYDROPHOBIC IMPREGNATION	coefficient of drying timelapse(%):	44.5 % [D & E]
		result/class:	compliant > 30%
BS EN ISO 7783: 2011	Determination of vapour permeability properties	Dry cup - 0150 %	S d 0.036 m.
		Wet cup- 50/93%	S d 0.036 m.
BS/EN 13501-1	Fire resistance	class	A1
prCEN/TS 772-22:2004	Freeze-thaw resistance classification	result/class:	F2 - Severe Exposure
	Dangerous substances.	result/class:	Not present

#### WARNING

It is always advisable to carry out application tests before surgery in order to check the absorption of the substrate in order to be able to choose the correct application technique (brush, roller, spray) and define the time and quantity of material for saturation impregnation.

Check immediately after the application any excess of product to avoid dripping effects that are still resolved with exposure to the environment and weather.

#### **DIRECTIONS FOR USE/APPLICATION**

#### Substrate preparation and quality

The surface to be treated must be clean, without traces of dust, dirt, oil, efflorescences, mold and lichens or old painting. For optimal cleaning of the substrate we recommend the use of a selective micro air-abrasion with IBIX SPECIAL CLEANING system to remove any residue of dirt, spores, mold and old paints.

In case of the presence of mold, mosses or lichens the support must be pre-treated with an eco-friendly water-based product, ESSENZIO, mixture of essential oils in synergy with each other, mainly: extract of oregano (Origanum vulgare) and thyme (Thymus vulgaris).

In case of saline efflorescence, we recommend one or more extraction cycles after hand brushing with DESAL paste. Any cracks shall be preliminarily repaired with appropriate mortars or mixtures, depending on the kind of substrate.

The humidity content should be less than 12% to a depth of 1cm.

#### **Product preparation**

I-PROTECT AS is ready to use; do not dilute.

#### **Product application**

• **I-PROTECT AS** may be applied using low pressure spray, brush or roller. Ensure application is from bottom to top on vertical surfaces taking care not to let the production run. Any subsequent applications must be applied "wet on wet". Re-application: Subsequent applications should ideally be applied "wet on wet" within 10 minutes after the previous application

• I-PROTECT AS: cannot be re-applied after curing as there will be a loss of adhesion

#### Recommendations

Do not apply if rain is expected within 4 hours. Water repellence is evident after initial curing but may take up to 7 days to reach 100% efficacy.

Wear protective gloves and glasses, and appropriate clothing whilst using the product.

After I-PROTECT AS is applied, it is no longer possible to paint.

In case of treatment on painted surfaces:

• Check that the paints used have adequate absorption characteristics (inorganic lime, silicatic, siloxanic, ...dyes)

• It is always suggested to test the product by carrying out absorption and colorimetric tests before and after treatment using IBIX MOBILE LAB

• Treatment on painted surfaces can cause a slight change in the colour saturation tone.

#### **COVERAGE**\*

- Architectural Concrete: 4-6 SqM/Ltr
- Porous-Natural Stone (Limestone, Sandstone): 2-5 SqM/Ltr
- Low Porosity Stone (Granite, Marble, Slate, Terracotta): 8 16 SqM/Ltr
- Self-blocking paving: 5-8 SqM/Ltr

\* Coverage can vary depending on the porosity of the stone materials.

All surfaces can be protected by applying a single layer of I-PROTECT AS, but you can apply up to three layers depending on the degree of absorption. After 1-2 hours you can test the water drop to check the effectiveness of the treatment. It is recommended that you test it on a small area to calculate the actual consumption as the porosity of the surface can vary.

#### PACKAGING

1, 5, 25 and 1000 ltr Units

#### STORAGE/CLEANING

Keep in a dry place (between 5°C and 30°C). Storage: 24 months following the production date when kept in the original unopened container. Clean all tools and equipment immediately after use with water.

#### **HEALTH AND SAFETY**

- Respiratory Protection: Under normal conditions no special respiratory protection equipment is needed.
- Hand Protection: Wear domestic gloves.
- Skin Protection: Wear protective clothing over exposed areas of skin.
- Eye Protection: Safety glasses with side-shields.
- If swallowed: Do not induce vomiting. Contact a doctor or a specialist.

#### WARNING

All the above indications and requirements, while referring to the consolidated experience in the use of the product, are to be considered, in any case, purely indicative and will have to be confirmed by application tests on the individual media; therefore, those wishing to use the product are required to determine whether or not it is suitable for the intended use and, in any case, assumes any responsibility that may result from its use.

#### **TENDER SPECIFICATIONS**

Protection of vertical and horizontal surfaces to slow down the degradation caused by atmospheric elements, rain, humidity and solar radiation, through application until saturation of non-film forming oleo-hydrophobic impregnating product based on aqueous fluoro-polymers, I-PROTECT AS by IBIX BIOCARE. It is high breathable, VOC-free, UV-resistant.

The application must be carried out after careful cleaning of the surface from inconsistent and consistent deposits, oil or old paints, after extraction of soluble salts in case of efflorescence, disinfection with biological patina, mold, moss and grouting of cracks and micro-extractions, to be assessed separately.

Including all the burdens for removing excess products in order to avoid halons or areas not sufficiently protected that can lead to leopard-spot wetting. It's also included the protection of neighbouring surfaces in particular when subjected to subsequent painting treatments.

To be evaluated on the treated surface, based on the type of material: Application on vertical surfaces and façade decorative elements, with low-pressure spray or brush

1. High porosity natural and artificial stone

- 2. Medium porosity natural and artificial stone
- 3. Low porosity natural and artificial stone

Painted and decorated plasters (lime, silicatic, siloxanic, ...)

5. architectural concrete

Application on horizontal surfaces with low pressure spray or roller

- 6. High porosity natural and artificial paving and stones
- 7. Medium porosity natural and artificial paving and stones
- 8. Low porosity natural and artificial paving and stones



