

# IMPERGUARD® RF



**FOR NEW CONCRETE STRUCTURES, POROUS STONES AND POROUS MATERIALS: PROTECTION AGAINST WATER, CHLORIDES, AND CORROSION OF REINFORCEMENT - MEETS STANDARD EN 1504-2:2004.**

- ✓ **PROTECTION AGAINST WATER AND CHLORIDES**
- ✓ **PREVENTS CORROSION AND CARBONATION**

- ✓ **PENETRATES UP TO 5 CM**
- ✓ **IDEAL FOR NEW CONCRETE**
- ✓ **AGEING > 15 YEARS**
- ✓ **INTERIOR AND EXTERIOR**

## PRODUCT DESCRIPTION

ImperGuard® RF is a colourless, solvent-free penetrating product for the deep-down protection of concrete and all new materials of inorganic origin against water, humidity, chlorides, carbonation and corrosion. Its penetrating power enables it to protect the substrate to a depth of 5 cm.

ImperGuard® RF is a non-film-forming product (allows the material to «breathe»). ImperGuard® RF also protects in the case of microcracks measuring up to 0.3 mm and arrests alkali/silica and alkali/aggregate reactions in concrete and construction materials.

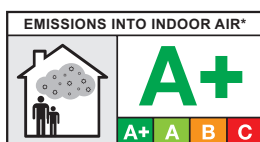
## USE

ImperGuard® RF is ideal for protecting all kinds of structures (bridges, pillars, car parks, etc.), architectonic concretes, concrete and reinforced-concrete structures, porous materials and porous stones.

ImperGuard® RF can also be used before applying ProtectGuard® and ProtectGuard® Color protective products or optionally before painting.

## ADVANTAGES AND CHARACTERISTICS

- Continues to work for more than 15 years.
- Effective in just a few hours.
- Deep-down penetrating power.
- Invisible.
- Non-film-forming: permeable to water vapour and does not affect the inorganic appearance of the surfaces.
- Effective even in very damp environments.
- Protects against water-borne chemical and biological agents (e.g. chlorides).
- Highly alkali-resistant.
- Meets standard EN 1504 system 2+ and 4.
- Ready to use.



## CHEMICAL NATURE

Alkylacoxysilane.

## OFFICIAL TESTS

ImperGuard® RF has undergone numerous tests demonstrating its performance, including resistance to chlorides and sulphates, water resistance, permeability to air and water vapour, etc.

- LRVision laboratory : Test of resistance to water and chlorides.
- Polymer Kiwa Institute (Germany): Test of compliance with standard EN 1504 -2.
- CBI Betong Institutet AB (Sweden): Test of penetration into concrete, breathability, water infiltration, freeze/thaw resistance and resistance to chlorides according to the requirements of the Swedish Motorway Agency.

## CONTAINERS

25 litres.

## TECHNICAL DATA

Physical state at 20 °C	: Liquid
Appearance	: Uncoloured
Odour	: None
pH	: Non measurable
Boiling point [°C]	: < 150 °C
Density	: 0.88 ± 0.02
Solubility in water [vol/vol]	: Insoluble
Flash point [°C]	: 63°C
VOCs	: 400 g/l*

## HOW TO USE

### Surface preparation :

- The conditions of application and substrate preparation
- must comply with French unified code of practice DTU 59.1.
- Apply the product to a surface that is clean, dust-free, grease-free and dry.
- Clean using Guard Cleaner® Surface Preparation to open up the porosity of the concrete and allow optimum grip of the protection. This step also allows the elimination of traces of efflorescence, laitance or cement bloom. To renew in case of persistent traces.
- In case of greasy stains or formwork release oil residues, use Guard Cleaner® Maintenance first.
- Rinse carefully with a pressure washer until the surface is free from all traces of the cleaner.
- Wait for complete drying through, approximately 24 hours before treatment.

### Application :

- Use neat, do not dilute.
- Shake the product well before use.
- Always carry out a preliminary test.
- Application requires 1 to 3 coats until the substrate is saturated, depending on exposure to weather and attack. In exceptional cases (e.g. tides, marine environment), 3 to 6 coats will be required.
- ImperGuard® RF can be coated within 4 hours to 1 day after application with a protective product such as ProtectGuard®, ProtectGuard® Color or a paint.
- Optimal efficiency obtained after 14 days.

## APPLICATION TOOLS

Apply using a low pressure sprayer with a Viton seal or an airless gun.



## COVERAGE

The figures below should be used only as a general guideline:

**100 to 180 g / m<sup>2</sup> - 5,5 to 10 m<sup>2</sup> / litre per layer.**

## CLEANING YOUR EQUIPMENT

Clean tools and equipment immediately after use with a solvent.

## STORAGE

- Keep in a dry place (between 5°C and 30°C).
- Storage: 12 months following the production date when kept in the original unopened container.

## RECOMMENDATIONS

- Only treat surfaces previously cleaned of all atmospheric pollution and stains.
- On fresh concrete or cement, wait at least 28 days before application.
- Do not apply to organic, metallic or waterproofing materials.
- For a perfect application and effective protection, **ProtectGuard® RF** must be used on a support having a temperature between 10°C and 30°C, a humidity level less than or equal to 5% and a pH between 7 and 10.
- Do not apply in rainy weather, very hot weather or in full wind. Air temperature between 10°C and 30°C. Hygrometry rate: between 30% and 80% RH (relative humidity). Check for the absence of precipitation within 24 hours of the work.
- Always handle the product in a ventilated area.
- Provide protection for the surrounding supports and protection for the applicator.
- Do not dilute or mix with any other product.

## HEALTH AND SAFETY

- Respiratory protection : Do not inhale the product. Wear a protection mask (type: ABEK).
- Hand protection : Wear fluorinated rubber gloves.
- Skin protection : Wear appropriate protective clothing.
- Eye protection : Wear protective airtight goggles (ref. standard EN 166)
- If swallowed : Do not induce vomiting. Contact a doctor or a specialist.

### PRODUCT FOR PROFESSIONAL USE ONLY

## TECHNICAL SUPPORT

### GUARD INDUSTRY

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