Code: 2050





# 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** 

**F** 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.

## **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.

#### 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

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

# **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 chlo-
- 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.

#### CHEMICAL NATURE

Alkylacoxysilane.

#### **CONTAINERS**

25 litres containers.

#### **TECHNICAL DATA**

Physical state at 20 °C : Liquid : Uncoloured **Appearence** 

: Non measurable

Odour : None

pΗ : < 150 °C Boiling point [°C] Density  $: 0.88 \pm 0.007$ Solubility in water [vol/vol] : Insoluble : 63°C Flash point [°C] : 400 g/l\* **VOCs** 

### **HOW TO USE**

#### Surface preparation:

- The surface must be dry, clean and free of any traces of oil, grease, curing product, dust, efflorescence, paint or any other substance liable to interfere with the penetration of ImperGuard® RF.
- In the case of pollution, grease stains, efflorescence, laitance or concrete bloom use Guard Remover® Eco Efflorescence & Cement.

#### Application:

- Use neat, do not dilute.
- Shake the product well before use.
- Always carry out a preliminary test.
- Application requires I 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 I day after application with a protective product such as ProtectGuard® HD, 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> 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

- Surfaces should not be treated until they have first been cleaned of all atmospheric pollution and all stains.
- Do not dilute or mix with another product.
- For ideal application and effective protection, ImperGuard® RF must be stirred. Also, it is essential that it be used only when the substrate temperature is between 5°C and 30°C. Avoid applying in strong winds.
- Do not apply in rain or very hot weather. Air temperature between 5°C and 30°C.

#### **HEALTH AND SAFETY**

- Respiratory protection: Wear a protective 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.

KEEP OUT OF THE REACH OF CHILDREN

#### **TECHNICAL SUPPORT**

#### **GUARD INDUSTRY**

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For the most recent version of our data sheet, visit our website www.guardindustry.com

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<sup>\*</sup> Calculation based on the components' data.