

**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® FT and ProtectGuard® Color protective products or optionally before painting.

CHEMICAL NATURE

- Alkyl alkoxysilane.

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.

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

5 and 25 litres. 1000 kg IBC containers.

TECHNICAL DATA

Physical state at 20 °C	: Liquid
Appearance	: Uncoloured
Odour	: None
pH	: Non measurable
Boiling point [°C]	: < 150 °C
Density	: 0.88 ± 0.007
Solubility in water [vol/vol]	: Insoluble
Flash point [°C]	: 63°C
VOCs	: <20 g/l*

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 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® 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/m² per layer

CLEANING YOUR EQUIPMENT

- Clean tools and equipment immediately after use with a solvent or with **GraffiGuard® 2060 Ecological**.

STORAGE

- 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.

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.
- Hand protection : Wear rubber gloves.
- Skin protection : Wear protective clothing with long sleeves.
- Eye protection : If there is a real risk of splashing, wear protective goggles.
- If swallowed : Do not induce vomiting. Contact a doctor or a specialist.

KEEP OUT OF THE REACH OF CHILDREN

TECHNICAL SUPPORT

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

Last updated : 19/07/2012