



# SILICATE MINERAL STAIN PROTECTS AND EMBELLISHES CONCRETE

- TRANSPARENT COLORED
  IMPREGNATION SYSTEM WITH
  CUSTOM OPACITY
- **M** HOMOGENIZES AND DECORATES
- MINERAL AND NATURAL
  AESTHETIC APPEARANCE
- REINFORCED WATER REPELLENT PROTECTION
- **UV-RESISTANT AND ALLOWS**THE SUPPORT TO BREATHE
- **INTERIOR AND EXTERIOR**

# **PRODUCT DESCRIPTION**

#### Transparent pigmented silicate mineral stain

ImperGuard® Color Silicate Stain is a system of two products (a colored base + a silicate thinner) to obtain a silicate mineral impregnation with low opacity to color exterior or interior concrete facades.

This stain gives a new aesthetic dimension to the works. It tints, embellishes or standardizes the appearance of concrete while preserving its skin and its minerality.

This system ImperGuard® Color Silicate Stain is a mineral stain which complies with the AFNOR NFT 36-005 standard: Family I class Ib (products containing at most 5% organic compounds).

ImperGuard® Color Silicate Stain associated with ImperGuard® Color Silicate Thinner can be diluted by default in 3 different levels depending on the desired level of transparency. It is however possible to create a custom opacity by diluting the stain between 1: 2 and 1:10.







The final color depends on the color of the stain and the color of the support.

ImperGuard® Color Silicate Stain is a non-film-forming product which perfectly respects the natural mineral aspect of concrete. In addition, the backing remains permeable to air and water vapor.

## Water-reppelent and mineralizing effect

ImperGuard® Color Silicate Stain has a water-repellent property. It provides lasting protection against the penetration of water and thus limits the harmful effects of humidity: infiltration, acid rain, erosion, freeze / thaw cycle, formation of mosses and lichens, appearance of efflorescence or saltpetre...

ImperGuard® Color Silicate Stain also has anti-dust properties. It hardens the surface of the concrete to make it less fragile and less dusty.

# USE

ImperGuard® Color Silicate Stain can be used vertically outdoors and indoors on all types of porous or slightly porous concrete: common, reinforced, fiber-reinforced, high performance (UHPC), architectural, stamped, smooth, prefabricated concrete, etc.

The stain can also be applied to architectural desativated concrete while keeping the aggregates visible.

# **ADVANTAGES AND CHARACTERISTICS**

- Gives color while retaining the minerality of the support and without forming a film on the surface: lets the support breathe.
- Optimal adhesion: no risk of chipping or detachment.
- Limits water from entering and limits the harmful effects of humidity: infiltration, acid rain, erosion, freeze / thaw cycle, formation of mosses and lichens, appearance of efflorescence or saltpetre...
- 25 year color guarantee, UV resistant.











# **AVAILABLE COLOURS**

ImperGuard® Color Silicate Stain is available in 42 standard colors. It is also possible to realize all types of colors on request from any existing color chart.

# CHEMICAL NATURE

Preparation of silicates and colloidal silicas (silica sol), acrylic copolymer, specialty additives and mineral pigments in aqueous phase.

## **ENVIRONMENT**

#### **Ecological and respects the environment:**

- Water-based product.
- No petroleum-based solvents. & silicone-free.
- Safe and non-toxic.
- Biodegradable > 80%\*.
- VOCs  $< 5 \text{ g/l}^*$ .
- Rating for VOC emissions into idoor air: A+

# CONTAINERS

- Coloured base: 5 and 25 liters bucket.
- Silicate thinner: 25 liters bucket.

# **TECHNICAL DATA**

## ImperGuard® Color Silicate Stain

Physical state at 20 °C : Liquid : Coloured Appearence Odour : Odourless  $: 10,75 \pm 0.5$ рΗ Boiling point [°C] : 100 °C Density : About I.0 depending on the

colour

Solubility in water [vol/vol] : Total

Flash point [°C] : Not applicable

## ImperGuard® Color Silicate Thinner:

Physical state at 20 °C : Liquid : Milky **Appearence** Odour : Odourless  $: 11,28 \pm 0.5$ рΗ Boiling point [°C] : 100 °C Density : 1.0 Solubility in water [vol/vol] : Total

Flash point [°C] : Not applicable

# **HOW TO USE**

#### Surface preparation:

- Apply the product to a surface that is clean, dust-free, grease-free and dry. To remove stains and marks of pollution use GuardWash®. For concrete bloom or efflorescence, use Guard Remover® Eco Efflorescence & cement.
- The conditions of application and substrate preparation must comply with French unified code of practice DTU 59.1.

## Preparation of the product:

- ImperGuard® Color Silicate Stain must be diluted with ImperGuard® Color Silicate Thinner before application.
- Before dilution, mechanically mix the two products for 2 min until complete homogenization.
- Recommended dilution:

	1:2	1:5	1:10
	I volume of	I volume of	I volume of
1	silicate stain	silicate stain	silicate stain
1	for	for	for
1	2 volumes of	5 volumes of	10 volumes of
1	silicate thinner	silicate thinner	silicate thinner

- · Depending on the desired opacity choice, it is possible to dilute the stain from 1: 2 to 1:10.
- Carry out the dilution in a measuring bucket then mix mechanically for 5 min.
- After dilution, the mixture can be used for 24 hours.

#### Application:

- Always carry out a preliminary test before application.
- The product is applied in two coats. Do not overload the support.
- Apply a first coat on the support. Usual consumption on concrete: 40 to 70 g /  $m^2$  (25 to  $14m^2$  / liter).
- Leave to dry 45 min to I hour depending on weather conditions (do not exceed 24 hours between 2 layers).
- Apply a second coat. Usual consumption on concrete: 40 to 70 g /  $m^2$  (25 to  $14m^2$  / liter).
- Apply a third coat if total consumption is not reached.
- Protected drying: 24 hours.
- Maximum efficiency obtained after 3 days.

# For more information refer to the technical specifications.

## **APPLICATION TOOLS**

- Apply using a wide brush, a foam roller, short bristles or long bristles depending on the nature of the support.
- It is also possible to apply using an HVLP / Airmix / Airless type sprayer.



# **COVERAGE**

The following values are for guidance only:

100 to 140g/m<sup>2</sup> for 2 layers.

# **CLEANING YOUR EQUIPMENT**

Clean tools and equipment immediately after use with water.

# **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**

- Do not treat surfaces until they have first been cleaned of all atmospheric pollution and all stains.
- For a perfect application and effective protection, ImperGuard<sup>®</sup> Color Silicate Stain must be used when the temperature of the substrates is between 10 ° C and 30 ° C and with a humidity level of less than 5%.
- 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 site.
- Provide protection for the surrounding supports and protection for the applicator.
- Always refer to the Technical Clauses Book in force.

# **HEALTH AND SAFETY**

- <u>Respiratory protection</u>: Wearing a P3 mask recommended in particular in confined spaces.
- Hand protection: Wear latex gloves.
- <u>Skin protection</u>: 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.

#### **PROFESSIONAL PRODUCT**

# **TECHNICAL SUPPORT**

#### **GUARD INDUSTRY**

7 rue Gutenberg • 93108 MONTREUIL Cedex • FRANCE Tél: +33 (0)1.55.86.17.60 • Fax:+33 (0)1.48.58.16.89

E-mail: contactus@guardindustry.com

#### www.guardindustry.com

**Important:** The content of this documentation is based on our experience with the product. Guard Industry guarantees the quality of its products but expressly disclaims all liability if the user does not follow the recommendations and conditions of use of the products, especially but not exclusively in the case of faulty application, application by untrained personnel, use of products not compatible with Guard Industry products, or adverse weather conditions For more information, consult the safety data sheet.

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

Last updated : 20/09/2020