



# PROTECTGUARD® COLOR Heat Control



## PLANT-BASED MINERAL COLOUR STAIN WATER-REPELLENT & ANTI-STAINING PROTECTS, EMBELLISHES AND DECORATES CONCRETES

- ✓ DECORATES AND EMBELLISHES
- ✓ PROTECTS AGAINST WATER, OIL, STAIN AND DIRT
- ✓ HEAT CONTROL TECHNOLOGY: DECREASES THE SURFACE

- ✓ BIOSOURCED FORMULA WITH 53% PLANT ORIGIN INGREDIENTS
- ✓ NO PEELING OFF & ALLOWS SUBSTRATE TO BREATHE
- ✓ UV-RESISTANT

### PRODUCT DESCRIPTION

ProtectGuard® Color Heat Control Plant-based Formula: one product, two functions:

#### 1. Water and oil repellent product

ProtectGuard® Color Heat Control Plant-based Formula gives lasting protection against the main causes of deterioration such as dirt, stains of all kinds, atmospheric pollution, greasy dirt, water intrusion, etc. Treated substrates resist penetration by water, oil and dirt. The cleanliness of treated substrates is thus assured.

#### 2. Pigmented stain with heat control technology

ProtectGuard® Color Heat Control Plant-based Formula is a substrate stain well suited to concretes. Unlike a paint, it is a semitransparent product which does not interfere with the inorganic nature of the materials. The final colour is dependent on the colour of the stain and the colour of the substrate.

ProtectGuard® Color Heat Control Plant-based Formula is a non-film-forming product – the substrate remains permeable to air and water vapour. ProtectGuard® Color

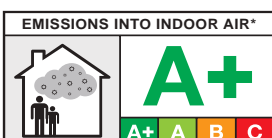
Heat Control Plant-based Formula is a one-component product and does not require the mandatory application of primer to make the surface beneath it uniform.

ProtectGuard® Color Heat Control Plant-based Formula is an innovative formula based on cold pigments. These new generation pigments absorb less heat and allow better durability of stained structures.

#### How does cold pigment technology work

Under the effect of IR rays, dark tints applied to concrete absorb energy and rise rapidly in temperature. This has the effect of heating the concrete and weakening it. The DTU59.1 therefore prohibits the use of any color with an absorption coefficient > 0.7, that is to say a solar reflection rate (TSR) < 30%.

Unlike conventional black pigments, the use of cold black pigments will allow the energy of IR rays to be reflected much more and decrease the energy absorbed in the form of heat. Result: concretes tinted with dark colors heat less and hold up better over time. The solar reflection rate (TSR) is increased and the absorption coefficient lowered. Dark colors thus become compliant with DTU59.1



## USE

ProtectGuard® Color Heat Control Plant-based Formula can be used vertically indoors and outdoors on all types of raw concrete more than 28 days old: regular concrete, precast, fibre-reinforced. For high performance concrete (UHPC, GRC), contact us.

## AVAILABLE COLOURS

ProtectGuard® Color Heat Control Plant-based Formula stains come in 25 standard colors and are available in matt or glossy finish. Customers' own colours can also be incorporated in the laboratory or on site on demand.

Each shade is available in 3 opacities:



## CHEMICAL NATURE

Bio-based acrylic copolymer with mineral pigments.

## ADVANTAGES AND CHARACTERISTICS

- Gives colour while preserving the minerality of concrete and without forming a surface film.
- Anti-stain & anti-dirt: prevents water and greasy liquids from penetrating.
- 25 years colour lasting & 10 years AXA guarantee.
- Limits recurrence of dirt build-up due to pollution and moss and lichen growth - makes cleaning easier.
- Sacrificial anti-graffiti. The colour stain must be reapplied after graffiti has been removed.
- Prevents freeze/thaw damage.
- Non-film-forming, allows substrate to breathe.
- UV-resistant. Ready to use.

## ENVIRONMENT

### Environment-friendly product:

- Raw materials from 53% renewable resources of plant origin in accordance with standard NF EN 16640.
- 90% biodegradable.
- Non hazardous, water-based product.
- Petroleum solvent free & fluorinated resin free.
- VOC < 1 g/l\*.

## OFFICIAL TESTS

ProtectGuard® Color Heat Control Plant-based Formula has undergone numerous tests by external laboratories demonstrating its performance.

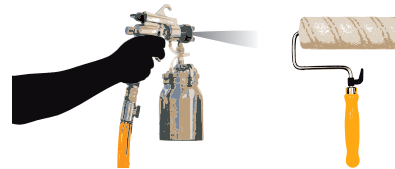
- DVI: Test of resistance to water, oil repellency & stain / Test of UV resistance / Water & water vapour permeability
- Eurofins: VOC emissions / LEED certification / Biodegradability / Biobased content.
- Thomas Bell-Wright: tested & certified as per ASTM E84 with Class A result. Refer to [www.tbwcert.com](http://www.tbwcert.com) for validity and full documentation.

## CONTAINERS

1, 5 and 25 litres cans.

## APPLICATION TOOLS

For a perfect application, we recommend using an HVLP sprayer. Application with a short nap roller is also possible.



## COVERAGE

Coverage depends on the porosity of the material. The figures below should be used only as a general guideline (final coverage):

**120 to 160g / m<sup>2</sup> or 6 to 8 m<sup>2</sup> / L.**

## TECHNICAL DATA

Physical state at 20 °C	: Liquid
Appearance	: Coloured
Odour	: Odourless
pH	: 7.5 ± 0.5
Boiling point [°C]	: 100 °C
Density	: ± 1.0 depending on colour
Solubility in water [vol/vol]	: Total
Flash point [°C]	: Not applicable

## 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.

## 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.
- Mix the product for at least 3 minutes using a mechanical agitator to homogenise the pigments with the rest of the composition.
- Always carry out a full preliminary test under actual conditions of use on a small surface to check effectiveness and compatibility with the substrate. The final visual result is obtained after 24 hours of drying.
- Protected drying: 24 hours.
- Optimum effectiveness obtained after 7 days.

### Application by HVLP :

- Apply from the bottom up in at least 2 cross coats. Do not exceed the recommended final consumption of 120 to 160 g/m<sup>2</sup>.
- Do not overload.
- Drying time between each coat: 15 to 60 minutes depending on weather conditions. The 1st coat must be dry to the touch before applying the 2nd coat.

### Application roller:

- Apply from the bottom up in at least 2 cross coats. Do not exceed the recommended final consumption of 120 to 160 g/m<sup>2</sup>.
- Do not overload.
- Drying time between each coat: 15 to 60 minutes depending on weather conditions. The 1st coat must be dry to the touch before applying the 2nd coat.

**For more information refer to the Technical Specifications Document.**

## MAINTENANCE

### Stains & dirt :

- The support can be cleaned with clear water or with **Guard® Cleaner Maintenance**.

### Graffiti & tags :

- Graffiti can be cleaned using **Guard® Remover Graffiti 2030**. Stain will need to be reapplied after cleaning.

## RECOMMENDATIONS

- Only treat surfaces previously cleaned of all atmospheric pollution and stains.
- Do not apply to young concrete, wait at least 28 days before application.
- Do not apply to organic, metallic or waterproofing materials.
- For a perfect application and effective protection, the product 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

For intensive use, refer to paragraph 8.2 of the safety data sheet.

- Respiratory protection : Under normal conditions of use where adequate ventilation is available, no special respiratory protection equipment is needed.
- Hand protection : Wear latex 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.

## PRODUCT FOR PROFESSIONAL USE ONLY

## TECHNICAL SUPPORT

### **GUARD INDUSTRY**

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**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](http://www.guardindustry.com)**

Last updated : 10/12/2024

Tested & certified as per ASTM E84  
with Class A result



Refer to [www.tbwcert.com](http://www.tbwcert.com)  
for validity and full  
documentation