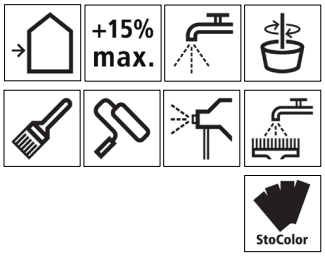
Building with conscience.

Technical Data Sheet

StoColor Dryonic®

Facade paint with Dryonic® Technology, biomimetic principle for dry facades against algae and fungal attacks, without biocide film protection



Characteristics

Area of application

- Exterior
- On mineral and organic substrates
- On EWIS
- On almost all conventional construction substrates
- On sloping substrates not sensitive to humidity up to an inclination of 45°
- On project-specific consultation is necessary for EWIS with inclined surfaces
- On concrete
- On trapezoidal profiled sheet facades (e.g. coated using the coil coating method)
- On galvanised metal substrates (e.g. rainwater pipes)
- On fibre cement facades
- On high pressure laminate facades
- Also suitable for roofs with an inclination > 3°, e.g. cement bricks, clay bricks, fibre cement (asbestos-free), sheet metal coverings

Properties

- Biomimetic principle for fastest drying after rain or dew formation
- Also available with X-black Technology: heat shield against solar heating
- Highest whiteness
- High level of colour shade variety and stability
- Minimum extender material breakdown (not easily scuffed)
- High level of resistance to mechanical stress
- Texture-retaining
- Pure acrylate binding agent
- CO_2 diffusion: class C1 in accordance with EN 1062-1
- Very good hiding power
- Water vapour permeable
- Alkali-resistant
- Very good adhesion to all substrates commonly used in construction
- Without biocide film protection

Appearance

- Matt (G3) in accordance with EN 1062-1
- Depending on the angle, the surface seems silk matt

Building with conscience.

Technical Data Sheet

StoColor Dryonic®

Technical Data

Criteria	Standard / test specification	Value/ Unit	Notes
Density	EN ISO 2811	1.2 - 1.4 g/cm³	
Diffusion-equivalent air layer thickness	EN ISO 7783	0.50 m	V2 medium
Water permeability rate w	EN 1062-1	< 0.05 kg/(m²h^{0,5})	W3 low
Water vapour diffusion-equivalent air layer thickness μ	EN ISO 7783	2,520	
Gloss	EN 1062-1	Matt	G3
Dry layer thickness	EN 1062-1	150 µm	E3 > 100; ≤ 200
Grain size	EN 1062-1	< 100 µm	
Carbon dioxide permeability	EN 1062-6	< 3 g/m²·d	C1

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

Substrate

Requirements

The substrate must be firm, dry, clean, load-bearing, and free from sinter layers, efflorescence and release agents.

Damp or not fully cured substrates can lead to defects in the following coatings, e.g. bubble formation, cracks.

Preparations

Check whether existing coatings are load-bearing. Remove any non load-bearing or structurally weak coatings. Facade surfaces affected by an algae and fungal attack must be carefully cleaned before overcoating. Depending on the level of infestation, disinfect the dry surfaces 1 - 2 times with StoPrim Fungal.

The use of StoColor Dryonic G is recommended for renovating surfaces heavily affected by an algae and fungal attack and/or for applications with an apparently high rate of infestation caused by microorganisms.

Application

Application temperature

Lowest temperature of substrate and air: +5 °C
Highest temperature of substrate and air: +30 °C

The substrate temperature must be above the dew point temperature.
The recommended difference is +3 °C.

Material preparation

Usage as an intermediate coat: dilute with max. 5 % water.

Usage as a finish: dilute with max. 5 % water.

Dilute with as little water as possible to achieve application consistency. Stir the material well before application. If applying the material by machine or pump, adjust the application consistency accordingly. Use only very little water to dilute intensely tinted material. Too much dilution impairs the properties of the material, e.g. with regard to application, hiding power, and colour shade intensity.

Consumption

Type of application	Approx. consumption
Per paint coat	0.12 - 0.15 lit/m²
For 2 coats	0.24 - 0.30 lit/m²

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project.

Technical Data Sheet

StoColor Dryonic®

Coating build-up	1) Primer: Depending on the type and condition of the substrate, it may be necessary to apply consolidating, absorbency-regulating prime coatings. If using on a mineral substrate, we recommend using an absorbency-equalising and adhesion-promoting primer. Note: If the primer is omitted, this can impair the application properties and the product's appearance. products: e.g. StoPrim Micro, StoPlex W 2) Intermediate coat: StoColor Dryonic® 3) Finish: StoColor Dryonic® Depending on the substrate and colour shades, further paint coats are necessary. The technical data are based on a double paint coat.
Application	By paint brush, by roller, by airless sprayer Low-overspray application with an airless sprayer: Low material application without further reworking using a roller: Fine Finish nozzles (e.g. TradeTrip 3 nozzle 412) Pressure: 150 - 200 bar Use a Metex Reuse or a bucket sieve. Application of higher material quantities with reworking by roller afterwards: Nozzle: 316 - 319 DD Pressure: approx. 120 bar Airless sprayer: inoSPRAY A 5000 or a comparable device Select the airless sprayer according to the size of the project. If necessary create a sample surface area and approve it. Recommendation: Use a nozzle extension and a flexible whip hose.
Drying, curing, ready for next coat	Higher humidity, lower temperatures, and low air exchange prolong the curing and drying times. During unfavourable weather conditions, apply suitable protective measures (e.g. protection against rain) to any facade surface which is to be treated or which has been freshly completed. At +20 °C temperature (air and substrate) and 65 % relative air humidity: over-coatable after approx. 24 hours.
Cleaning the tools	Tools must be cleaned immediately after use with cleaning water
Notes, recommendations, special information, miscellaneous	Please consult the local sales office for further information and any site assistance required.

Building with conscience.

Technical Data Sheet

StoColor Dryonic®

Delivery

Colour shade

White and selected colour, tintable in accordance with the StoColor System

Tinted material:
Before application, check that the material corresponds to the colour shade ordered. Slight colour shade deviations compared with previous deliveries are possible. Only use deliveries with the same batch number on one surface. Mix different batches before application.

Colour stability:
The effects of weather, moisture, UV radiation, and deposits can alter the surface of the coating. Changes in colour shade are possible. The change process is dynamic and influenced by climatic conditions and exposure. National regulations, data sheets etc. apply.

Colour accuracy:
Different weather and project conditions influence colour shade accuracy and colour shade uniformity. Avoid the following conditions (a - d) in every case:
a) uneven absorbency of the substrate
b) different levels of substrate moisture over an area
c) partly very different alkalinity and/or substances in the substrate
d) direct sunlight with sharp, clear shadows on a still-damp coating

Washout of processing aids: If water such as condensation, fog, or rain comes into contact with not fully dry coatings, processing aids may be released from the coating and build up on the surface.

Whether the effect is strongly visible or not depends on the intensity of the colour shade. This does not influence the product quality. The effects disappear when the surface is exposed to further weathering.

Packaging

Article number	Name	Packing

Storage

Storage conditions

Store in cool dry conditions; avoid direct sunlight.

Storage life

The quality of the material in its original container is guaranteed for the maximum stated storage life. The storage life information is included in the batch number on the container.

Batch number explanation:

Number 1 = the last number of year, numbers 2 + 3 = a week
i.e.: 1450013223 – stock date until the 45th week of the year 2021

Identification

Product group

Facade Paint

Safety

Please refer to Safety Data Sheet.

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Technical Data Sheet

StoColor Dryonic®

Special Notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.

Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on www.sto-sea.com.

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*Product images may differ from the actual product.