Technical Data Sheet

StoColor X-black

Facade paint with X-black Technology, for reducing solar heating in case of dark colour shades.

Characteristics

Area of application
- exterior
- for heat-reflective paint coats on mineral and organic substrates
- for paint coats with an intense colour shade
- not suitable for horizontal or sloping surfaces that are subject to weathering (does not apply to StoDeco Facade Elements)

Properties
- reflects near-infrared components of sunlight
- reduces solar heating of facade surfaces
- increases protection against crack formation in the substrate
- texture-retaining
- very highly water-repellent
- water vapour permeable
- pure acrylate binding agent
- alkali-resistant
- very good adhesion
- additional film protection possible
- very good hiding power
- especially for intense colour shades

Appearance
- matt

Information/notes
- with encapsulated film protection

Technical data

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Standard / test specification</th>
<th>Value / Unit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>EN ISO 2811</td>
<td>1.4 - 1.5 g/cm³</td>
<td></td>
</tr>
<tr>
<td>Diffusion-equivalent air layer thickness</td>
<td>EN ISO 7783</td>
<td>1.25 m</td>
<td>V2 medium</td>
</tr>
<tr>
<td>Water permeability rate w</td>
<td>EN 1062-1</td>
<td>&lt; 0.05 kg/(m²h⁰⁵)</td>
<td>W3 low</td>
</tr>
</tbody>
</table>
Technical Data Sheet
StoColor X-black

<table>
<thead>
<tr>
<th>Property</th>
<th>EN ISO 7783</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water vapour diffusion-equivalent air layer thickness µ</td>
<td>8,200</td>
<td>average value</td>
<td></td>
</tr>
<tr>
<td>Gloss</td>
<td>EN 1062-1</td>
<td>Matt G3</td>
<td></td>
</tr>
<tr>
<td>Dry layer thickness</td>
<td>EN 1062-1</td>
<td>150 µm</td>
<td>E3 &gt; 100; ≤ 200</td>
</tr>
<tr>
<td>Grain size</td>
<td>EN 1062-1</td>
<td>&lt; 100 µm</td>
<td>S1 fine</td>
</tr>
</tbody>
</table>

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.

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.
Do not mix with other products.

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. Do not dilute intensely tinted material, or only use very little water. 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       | 0.15 - 0.18 l/m²
for 2 application cycles | 0.30 - 0.36 l/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 X-black

#### Coating build-up

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primer:</td>
<td>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</td>
</tr>
<tr>
<td>Intermediate coat:</td>
<td>StoColor X-black</td>
</tr>
<tr>
<td>Finish:</td>
<td>StoColor X-black</td>
</tr>
</tbody>
</table>

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:
- Nozzle: 4/17 - 4/25
- Pressure: 80 - 100 bar

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. 8 hours.

#### Cleaning the tools

Clean tools with water immediately after use.

#### Delivery

- Colour shade: tintable in accordance with the StoColor System

The special formulation with NIR technology can lead to slight differences in colour shade compared to standard tinting. Only use material with the same batch number on continuous or directly adjacent areas.

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.

Extender material breakdown:
Mechanical stress can damage the extenders in the material and lead to lighter marks. This does not influence the product quality or functionality.

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.

Tintable
The product cannot be tinted by the applicator.

Packaging
pail

Storage

Storage conditions
Store tightly sealed in frost-free conditions. Protect from heat and direct sunlight.

Storage life
The quality of the product in its original container is guaranteed until the maximum storage life has expired. The storage life information is included in the batch number on the container.

Explanation of batch no.:
digit 1 = last digit of the year, digits 2 + 3 = calendar week
Example: 145013223 - storage life ends week 45 in 2021

Certificates/approvals

ETA-09/0288 StoTherm Classic™ 5 (MW/MW-L and StoArmat Classic plus/StoArmat Classic plus QS)
Technical Data Sheet
StoColor X-black

Identification

Product group
Facade paint

Composition

In accordance with the VdL directive (German Paint and Printing Ink Association) on coating materials for buildings
- Polymer dispersion
- Titanium dioxide
- Mineral extenders
- Silicate extenders
- Water
- Glycol ether
- Aliphatics
- Thickener
- Anti-foaming agents
- Dispersing agent
- Wetting agents
- Coating protection agent based on isoproturon/terbutryn
- Coating protection agent based on 3-iodo-2-propynyl butylcarbamate (IPBC)
- Storage protection agent based on BIT/ZPT
- Storage protection agent based on CIT/MIT 3:1

Safety

This product is subject to compulsory labelling in accordance with the current EU regulation.
Observe the Safety Data Sheet!
Safety instructions refer to the ready-to-use, unapplied product.

Harmful to aquatic life with long lasting effects. Avoid release to the environment. Contents/container to be disposed of through approved disposal contractor or taken to municipal collection point.

EUH208

Contains 1,2-benizothiazol-3(2H)-one, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one[EC no.247-500-7] and 2-methyl-2H-isothiazol-3-one[EC no.220-239-6] (3:1). May produce an allergic reaction.

These are preservatives.
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 the Internet.

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