# Bodenguard S-100

CE EN 1504-2 CE EN13813


**DILUTION**
5-10%
with NITRO 2000

**CONSUMPTION**
0,170 – 0,210
Kg/m²/coat

**APPLICATION TOOLS**
Brush, roller, or airless gun

**MIX**
80A : 20B

**2-component, solvent based, epoxy coating**

- **Exceptional abrasion resistance**
- **High hardness**
- **Excellent finishing**
- **Chemical Resistance**

## DESCRIPTION

Two-component, solvent-based epoxy coating, specifically designed for indoor floors and surfaces exposed to water or chemicals. It is characterized by exceptionally high hardness and resistance to wear, alkalis, dilute acids, oil fuels and other chemicals. It is CE labeled according to standards **EN 1504-2** & **EN 13813** and is compliant to **EN 1186** for direct food contact.

## APPLICATION FIELD

It is used as a protective and decorative coating for cementitious and metallic interior surfaces, suitable for parking spaces, industrial and commercial areas such as warehouses, workshops, laboratories, food industry etc.

**A/j (SB) Two-pack reactive performance coatings for specific end use such as floors**
- VOC Limit Value: 500 g/L
- Maximum VOC concentration of the ready to use product: 499 g/L

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| TECHNICAL DATA | | |
|---|---|---|
| Binder Type | | A comp: Epoxy resin<br>B comp: Mixture of polyamides |
| Mixing ratio (A+B) w/w | | 80A : 20B |
| Density ISO2811 @ 25 °C (A+B) | | 1,25 g/mL (±0,05) |
| Solids content w/w ISO3251-03 (A+B) | | 71,6 % (±2) |
| Solids content v/v (A+B) | | 62,3 %(±2) |
| Viscosity ISO2555 @ 25°C (A+B) | | 2400 mPas (±300) (sp4/100rpm) |
| POT life | | 2,0 – 2,5 h @ 15°C |
| | | 1,5 – 2,0 h @ 25°C |
| | | 1,0 – 1,5 h @ 35°C |
| Consumption | 2-3 coats for smooth surface | 0,170 – 0,200 kg/m²/coat |
| | 2-3 coats for rough surface | 0,190 – 0,210 kg/m²/coat |
| | final coat for slip-resistant surface | ~0,350 kg/m² |
| | 2 layers for vertical surface | 0,100 – 0,120 kg/m²/coat |
| Dry film thickness for horizontal surfaces (DFT) | | >160 µm |
| Drying time (Dust-free) @ 20°C | | ~4 h |
| Walkability | | 16 h |
| Recoating | | 16-24 h |
| Curing time | | 7 days |
| Gloss level @ 60° ISO2813 | | >60 GU |
| Abrasion resistance (CS 10/1000c/1000g) ASTM D4060 | | <60 mg |
| Scratch test using a spring-loaded pen ISO22557 | | >10 N |
| Cross-cut ISO2409 | | Class 0 (No detachment) |
| Wet scrub resistance ISO11998 | | Class 1 |
| Pendulum Hardness ISO1522 (15 days) | | 130 sec (±15) |
| Hardness SHORE D ASTM D2240 | | 30 (±5) |
| Flexibility with conical mandrel ISO6860 | | ø<3,7 mm |
| Slip Resistance EN13036-4 | Dry | >90 |
| | Wet | <21 |
| | Dry with PES-400AS | >90 |
| | Wet with PES-400AS | 28-31 |
| | Dry with Q-500AS | >90 |
| | Wet with Q-500AS | 30-32 |

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| IN ACCORDANCE TO EN1504-2 & EN13813 | | | | | |
|---|---|---|---|---|---|
| Adhesion EN1542 | ≥ 4,0 N/mm² | | | | |
| Bonding EN13892-8 | ≥ 4,0 N/mm² | | | | |
| Permeability to water vapor EN ISO7783 | Sd>10 m | | | | |
| Capillary absorption and permeability to water EN1062-3 | w < 0,021 kg/m² · h$^{0,5}$ | | | | |
| Permeability to $CO_2$ EN1062-6 | Sd>50 m | | | | |
| Resistance to severe chemical attack EN13529 | | Chlorine | 20% NaOH | 20% $H_2SO_4$ | Oil fuels |
| | Blistering | 0(S0) | 0(S0) | 0(S0) | 0(S0) |
| | Cracking | 0(S0) | 0(S0) | 0(S0) | 0(S0) |
| | Flacking | 0(S0) | 0(S0) | 2(S4) | 0(S0) |
| Wear resistance BCA EN 13892-4 | 30µm | | | | |
| Impact resistance ISO 6272-1 (500 mm /1000 g (±10)) | Pass | | | | |
| Reaction to fire EN13501-1 | E | | | | |

## DIRECTIONS FOR USE:

1. **SUBSTRATE – PREPARATION** The substrate to be coated must be clean, stable, solid, and free from standing water, rust, moisture (less than 4%), dust, oils, lime, tar, and any loose materials that could affect adhesion. For any repairs deemed necessary for the proper preparation of the substrate, the appropriate repair materials from **KRAFT Paints** should be used.

**Concrete or absorbent surfaces:** The quality of the concrete must be of a class equal to or higher than C20/25, and the cement content of the screed must be at least 350 kg/m³, with full curing for at least 28 days beforehand. Proper preparation and smoothing of the surface is essential, using mechanical methods such as sanding, milling, sandblasting, etc., and the ideal removal of dust. The repair of cracks or the filling of holes can be carried out using a mixture of **BODENGUARD SL-550 PRIMER** with **BODENGUARD Q-500AS** quartz sand, after the appropriate priming has been done.

Priming: Once properly prepared, apply one coat of the clear **BODENGUARD S-150 PRIMER,** solvent-based, after diluting up to 10% by weight with **KRAFT NITRO 2000,** or the water-based clear primer **BODENGUARD H-250 PRIMER** diluted up to 10% by weight with water. After 24 hours, apply the final topcoat. For highly absorbent surfaces, apply the solvent-free **BODENGUARD SL-550 PRIMER.**
After 24 hours, apply the topcoat.

**Metallic or non-absorbent surfaces:** Proper preparation is necessary using mechanical methods such as sanding with sandpaper or sandblasting, thorough removal of dust, rust, or loose areas, and degreasing with **KRAFT NITRO 2000** thinner.

Priming: Once properly prepared, apply one or two coats of the anti-corrosive **BODENGUARD AR-120 PRIMER,** solvent-based, after diluting up to 10% by weight with **KRAFT NITRO 2000.**
After 24 hours, apply the topcoat.

2. **MIXING** The components A and B are packaged in containers with a predetermined mixing ratio. Component B is added completely into the container of component A. Mix the two components for about 1-2 minutes manually or with a low-speed drill , ensuring the mixture is homogeneous. Avoid excessive mixing to prevent air entrapment. Then, dilute approximately 5-10% by weight with **KRAFT NITRO 2000 thinner.**

3. **APPLICATION BODENGUARD S-100** is applied in at least two coats, within 24 hours of the primer and after it has dried. It can be used diluted from 5% to 10% by weight with **KRAFT NITRO 2000** thinner and is applied with a roller, brush, or airless spray gun. Each subsequent coat is applied after the previous one has dried and is always within 24 hours.

**Anti-slip surfaces:** To achieve anti-slip surfaces, before applying the final coat of **BODENGUARD S-100,** add approximately 2% by weight of **BODENGUARD PES-400AS** polyester granules (maximum grain size 400µm) to the mixture and stir for about ½ – 1 minute, until fully homogeneous. Then, apply this final coat to the surface. Alternatively, use **BODENGUARD Q-500AS** quartz sand (maximum grain size 500µm) by broadcasting it onto the wet penultimate coat of **BODENGUARD S-100** at a consumption rate of approximately 2.5 kg per square meter. Then, after 24 hours and once the coating is completely dry, remove the excess quartz sand that did not adhere to the surface, either manually or with a vacuum cleaner. Finally, apply the final coat of **BODENGUARD S-100.**

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## IMPORTANT NOTES:

• The temperature affects the working time of epoxy materials. Ideal application conditions are between +15°C and +25°C. At higher temperatures, the material sets more quickly, while mild preheating is required in winter and cool storage in summer.

• Due to the nature of the material, exposure of the final coating to ultraviolet radiation may, over time, cause chalking.

• It should not be applied under humid conditions as this can negatively affect adhesion, film properties and/or the result.

• The substrate should have a temperature of at least 5°C to minimize the risk of condensation or bubbles on the final surface.

• On existing surfaces with epoxy coatings, uniform, light sanding is required before each new application. In this case, and provided the substrate is stable, **BODENGUARD S-100** thinned 10-15% by weight with **KRAFT NITRO 2000** can replace the primer, and at least two additional coats of paint are required.

• If there is a long waiting period between coats, sanding the surface before repainting is mandatory.

• Anti-slip properties can also be achieved using quartz sand with a larger grain size (e.g., **BODENGUARD Q-1200L**), and the number of sealing coats may be increased as needed.

• **BODENGUARD S-100** contains solvents, so when applying it in enclosed spaces, adequate ventilation and the use of Personal Protective Equipment (e.g., appropriate face mask, protective goggles, etc.) are required.

## HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

### FOR PROFESSIONAL USE ONLY

Carefully read and follow all cautions and warnings on product label. For further information refer to the Safety Data Sheet for this product.

**Poison Centre Telephone:**

+30 210 7793 777

## STORAGE

Store the product at temperatures between 5°C and 35°C away from direct sunlight and rain, for a maximum of 24 months from the date of production. Keep containers tightly closed when not in use.

## PACKAGING - SHADES

Available in White, in ready-made shades RAL 7005, RAL 7035, RAL 7040, and others upon request, in SET packaging of 5KG and 10KG.

| CE 1301 | **DRUCKFARBEN HELLAS SA**<br>Megaridos Ave., Kallistiri area,<br>GR-19300 Aspropyrgos, Greece |
|---|---|
| **25**<br>**DoP No 04.42**<br>**Bodenguard S-100 2K**<br>**EN 1504-2:2004**<br>**Coating (C) for surface protection of concrete structures according to principles 1(PI), 2 (MC) and 8 (IR)** | |
| Reaction to fire | $E_{fl}$ |
| Permeability to $CO_2$ | $s_D$ > 50 m |
| Permeability to Water Vapour | Class II |
| Capillary Absorption and permeability to water | w < 0.1 kg/m² · $h^{0.5}$ |
| Adhesion strength by pull-off test | ≥ 1.5 N/mm² |
| Dangerous substances | see SDS |

| CE 1871 / 1301 | **DRUCKFARBEN HELLAS SA**<br>Megaridos Ave., Kallistiri area,<br>GR-19300 Aspropyrgos, Greece |
|---|---|
| **25**<br>DoP No 04.43<br>**Bodenguard S-100 2K**<br>**EN 13813:2002**<br>**Synthetic resin screed material for use internally in buildings (SR B2,0-AR0,5-IR 4)** | |
| Reaction to Fire | Class $E_{fl}$ |
| Release of Corrosive Substances | SR |
| Water Permeability | NPD |
| Wear Resistance (BCA) | AR0,5 |
| Bond Strength | B2,0 |
| Impact Resistance | IR 4 |
| Impact Sound Insulation | NPD |
| Sound Absorption | NPD |
| Thermal Resistance | NPD |
| Chemical Resistance | NPD |
| Release of Dangerous Substances | See SDS |

**COMPANY CERTIFIED BY**
✓ ISO 9001
✓ ISO 140001
✓ ISO 50001
✓ ISO 45001





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