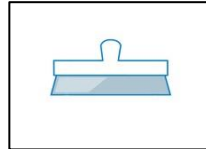
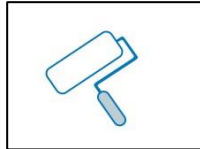
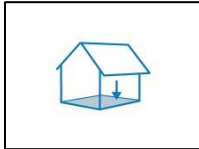


Product Description

DisboPOX 110 SB is a glossy premium quality two pack polyamide cured solvent based pigmented self-priming epoxy top coat, designed to provide continuous protection for all mineral substrates including concrete and mortar, which are without heavy motor vehicle traffic. **DisboPOX 110 SB** is used to provide a hard wearing, easily cleaned and non-dusting surface. **DisboPOX 110 SB** is recommended as economical sealer to coat the floors, where protection to floor from spillage of oil and other common chemicals is required.



Recommended Use

DisboPOX 110 SB is suitable for interior use on normal absorbent mineral floor surfaces:

Concrete, Plaster, cementitious or SB Epoxy screeds/mortars; depending on the conditions of the mineral substrates Unsuitable are all mineral substrates which showing not sound and dry, surface defects, cement laitance, weak compressive strength, rising moisture, contaminants or condensation.

DisboPOX 110 SB should only be used by experienced and trained professionals.

Recommended Fields of Application

Garages
Production and assembly lines
Laboratories
Warehousing
Hotels and restaurants
Workshops
Food and beverage manufacturing and processing
Areas with pedestrian and light vehicular traffic
Dairies
Showrooms
Chemical production and processing
Schools and hospitals

Physical Properties*

Colour	Selected range of Standard colours Always use material of same batch or mix different batches, when applying on seamless surfaces.
Volume solids	53±2%
VOC	344 g/litre
Thinner/Cleaner	Epoxy thinner
Finish	Gloss
Flash point	> 24°C
Packing size	4 & 20 kg (Base + Hardener)
Mixing ratio	4.5 base : 1.0 hardener pbw
Shelf life	6 months

*The values stated are average values. All Data is valid for mixed product only. The actual value determined on an individual delivery may deviate slightly, without compromising product suitability. In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

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Advantages

- Good wear and abrasion resistance
- Non-dusting surface
- Easy application
- Hygienic - impervious finish provides easily cleaned surface
- After full curing physiologically harmless
- Pore free seamless film - Prevents ingress of harmful chemicals
- Good chemical resistance and proven against wide range of industrial chemicals
- Durable and low maintenance costs

Certificates and Test Values*

- DCLD Product Conformity certified
- ADCE certified civil supplier

Test Name	Test Method	Remarks
Shore A Hardness	ASTM D 2240	A/70/1
Impact Resistance	ASTM ISO 6272	No signs of crack or disbanding
Crack Bridging Capacity	ASTM C 836:95	1.7mm
Bond Strength	BS 1881 part 207 (lock test)	Failure occurred within substrate
Rapid Chloride Penetration	ASTM C 1202	251
Water Penetration	BS EN 12390 Part 8-2000	Nil
Chemical Resistance	ASTM D543	No changes were observed
Abrasion Resistance	ASTM D 4060 - 10	107 (mg) weight loss after 1000 cycles

*Additional certificates and approvals may available on request or could be arranged if required. The material offers good general chemical resistance, but as in all corrosive situations, a full analysis of operating and exposure conditions is required, followed by reference to chemical resistance data to ensure product suitability.

Substrate Quality and Surface Preparation

The long-term durability of any resin floor system is determined by the adhesive bond achieved between the flooring material and the substrate. IT IS MOST IMPORTANT THAT SUBSTRATES ARE CORRECTLY PREPARED PRIOR APPLICATION!
 All substrates (new and old) must be structurally sound and free from contamination such as oil and grease, rubber skid marks mortar and paint splashes, curing compound residues or other adhesion impairing contaminants. Conventional concrete curing compounds should be removed before application. Excess laitance deposits are best removed by mechanical surface profiling, like diamond grinding, ball blasting, grit or shot blasting, milling or hydro-jetting (including the necessary post-treatment), followed by brush and vacuum cleaning to remove dust debris to achieve an open textured surface. Mechanical wire brushing may be appropriate for small areas. Oil and grease penetration should be removed using a proprietary chemical degreaser or by hot compressed air treatment. Any damaged areas, surface irregularities or blowholes/voids should be repaired before application. Adjust the substrate evenness of the planned, finer surface finish. If necessary, carry out additional substrate levelling measures. The compressive strength of the substrate shall not be less than 25MPa. Damaged, weak concrete should be cut back to sound concrete and surface defects must made good with a suitable cementitious repair mortar. The concrete slab in contact with the ground must have a vapour barrier installed. Repairs must be well set and dried out. Damp or not fully cured substrates can lead to defects in subsequent coats, such as blistering or cracks. Check existing coatings for their load-bearing capacity. Remove any non-load bearing or structurally weak coatings. The pull-off (adhesive/tensile bond) strength of substrates must be 1.5 N/mm² on an average, with a minimum individual value of 1.0 N/mm². The residual moisture content of the substrate must not exceed 4% pbw when using the CM-measurement or Oven-dry-method.

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No raising moisture according to ASTM (Polyethylene-sheet).The temperature of the substrate must be at least 3°C above the current dew point temperature. A damp proof course must have been properly installed and be intact. IF IN DOUBT, APPLY TEST AREA FIRST!

Protect walls and columns against resin splashes using masking tape and plastic sheeting.

Mixing the Coating

DisboPOX 110 SB should be mixed in the proportions supplied in the exact ratio. Before mixing, precondition both base and hardener components to a temperature of approximately 15 to 25°C.

DO NOT MIX BY HAND!

The base and hardener components of **DisboPOX 110 SB** should be thoroughly stirred before the two are mixed together. Mix mechanically using a slow speed stainless steel (300-400 rpm) electric stirrer with a wing type mixing paddle or other suitable equipment. For the preparation of mortars use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used. Mix the base slowly in its container, and then the entire contents of the hardener container should be poured into the base container while continuing to mix the two materials thoroughly for 3 to 4 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles.

DO NOT WORK OUT OF THE ORIGINAL CONTAINER!

After proper mixing to a homogeneous consistency pour the mixed material of base and hardener into a fresh container and mix for another minute thoroughly to achieve a consistent mix. Then if necessary, add the quartz sand and mix for a further 2 minutes until a uniform mix has been achieved. Use the material as quickly as possible after mixing.

ENSURE SHORT STIRRING TIMES AT LOW SPEED TO PREVENT AIR BUBBLE FORMATION IN THE MATERIAL!

Foam formation can have an impact on adhesion and can cause visible small pores. This, in turn, leads to patchy and inhomogeneous drying and visible imperfection of the coating layer.

Only if necessary adjust the working consistency of **DisboPOX 110 SB** with **Epoxy Thinner** up to max. 10%.

Film Thickness and Spreading Rate on Average Quality Substrate*

Primer/Base/Roller/Sealer Coat- on low/medium porous, even concrete, smooth

	Minimum	Typical	Maximum	Consumption	
Wet film thickness	94	113	132	µm	
Dry film thickness	50	60	70	µm	
Theoretical spreading rate	8.8	7.3	6.3	m ² /kg	0.11-0.16 kg/m ²

If the coating is not to be over coated within 24 hours, the fresh primer should be sanded off (not to excess, but grain to grain) with DisboADD 450 (0.1-0.4mm): Consumption 0.1-0.7 kg/m²

If necessary (for anti-slip) sprinkle in excess the fresh levelling layer with DisboADD 460 (0.4-0.7mm) or DisboADD 480 (0.7-1.2mm): Consumption 0.5-1.5 kg/m²

*Indicated rates are indicative per coat. This indication does not take into account usage for spilling or loss on site. These figures are theoretical and do not allow for any additional material required due to surface porosity, surface profile, variations in level or wastage etc. or application conditions. Coverage on non-slip aggregate would reduce spreading rate considerably. Consumption of the mixed material is dependent on the surface condition, porosity and roughness, and may be higher on very rough or porous substrates. The exact rate of consumption for your particular project is best established by a trial application on site and executed by your desired applicator.

Pot Life / Working Life*

Substrate temperature	10°C	25°C	40C	
Pot Life	240	180	60	minutes

*Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

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Drying Time*

Substrate temperature	10°C	25°C	40°C	
Dry to over coat, minimum	24	12	6	hours
Dry to over coat, maximum	32	24	16	hours
Ready for use - foot traffic	72	36	18	hours
Ready for use - light traffic	5	3	2	days
Ready for use - full cure for service	10	7	5	days

* Drying time generally related to air circulation, temperature, film thickness, no of coats and relative humidity. The given data must be considered as guidelines per coat only. The actual drying time before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying substrate, requirement for early handling and mechanical strength etc. The figures given are typical with: Good ventilation (outdoor exposure or free circulation of air), typical film thickness, on coat on top of inert substrate and relative humidity 70%. Dry to over coat, minimum: The shortest time allowed before the next coat can be applied. Dry to over coat, maximum, atmospheric: The longest time allowed before the next coat can be applied. Ready for use: Minimum time before the coating can be permanently exposed to the intended environment/medium.

Application Conditions/Limitations

New concrete floor should be at least 28 days old or have a moisture content of less than 4% before proceeding with epoxy application. Substrate temperature should be max. 30°C and min.10 and at least 3°C above the dew point of the air and for at least 24 hours after the application at (15°C). **DisboPOX 110 SB** should not be applied on surfaces known to, or likely to suffer from, rising dampness, potential osmosis problems or have a relative humidity greater than 75%. The curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly. To fully cure, the material, substrate and application temperature should not fall below the minimum. For all floor coating applications, apply on a constant or falling temperature only as this will decrease the risk of bubble formation due to expansion of air that is enclosed in the concrete! If applied during rising temperatures “pin holing” may occur from rising air. After application, the material should be protected from direct contact with water for approx. 24h (at 20°C). Within this period, contact with water can cause a surface bloom and/or surface tackiness, both of which must be removed. In common with all epoxy materials, some slight shade changes may be experienced over the long term when placed in adverse exposure conditions. Any such change in shade is not regarded as being detrimental to performance.

Application Equipment’s/Tools

DisboPOX 110 SB can be applied to the prepared substrate by spreading with a squeegee, roller, brush or trowel. The best choose depending to substrate condition, application method and how the material will be used. Re-usable tools must be cleaned carefully with **Epoxy Thinner**. Always ensure that the tools are to be in use for SB Epoxy material only (not for PUR or water based Epoxy!).

Associated Products

DisboPOX Epoxy Filler SF (Off-white to beige, solvent free epoxy filler)

DisboPOX 500 SB (Off-white to beige, solvent based epoxy filler)

DisboPOX 100 SB (transparent solvent based epoxy primer)

DisboADD (Silica quartz sands/fillers):	Product name	Grain size
	DisboADD 450	0.1 – 0.4 mm
	DisboADD 460	0.4 – 0.7 mm
	DisboADD 480	0.7 – 1.2 mm
	DisboADD 490	1.2 – 2.0 mm

Various **non-aqueous DisboPOX/DisboPUR topcoats** can be used in combination with this product. Contact Caparol for specific system recommendation.

Caparol Epoxy Thinner (Thinner)

Cleaning of Tools

Tools must be cleaned immediately after use or during longer breaks with **Epoxy Thinner**.

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Typical Application Procedure*

Primer/Base Coat

Ensure that the substrate is free from dust and building debris and that the area has been secured to prevent intrusion of dust, airborne particles, insects, small animals, etc. Make sure that windows and doors are closed. To avoid colour deviation from one batch of the resin to another, only use resins with the same batch number in the same area.

All concrete surfaces should be primed as required with **DisboPOX 110 SB**. The material can be diluted with up to 10% Caparol **Epoxy Thinner** and used itself as the primer coat.

If the coating is not to be over coated within 24 hours, the fresh primer should be sanded off (not to excess, but grain to grain) with **DisboADD 450** (0.1-0.4 mm). Also to sprinkle sand onto the wet primed surface is required for:

- Subsequent anti-slip (anti-skid) coatings, applied by roller, use DisboADD 450 (0.1-0.4 mm)
- Subsequent anti-slip (anti-skid) coatings, applied by roller, use DisboADD 460 (0.4-0.7 mm)
- Subsequent anti-slip (anti-skid) coatings, applied by roller, use DisboADD 480 (0.7-1.2 mm)

If the application of **DisboPOX 110 SB** is delayed more than 16 hours at 40°C and 24 hours at 25°C after the application of the primer (not sanded off), then the primer must be thoroughly abraded to give an adequate mechanical key and solvent wiped. A subsequent application of a non-aqueous DisboPOX /DisboPUR coating can be carried out in accordance to the respective Technical Data Sheet and/or Method Statement.

Roller/Sealer Coat, smooth

DisboPOX 110 SB can be applied directly as a self-primer system for interior coating system. 1st coat should be applied using a good quality roller, suitable for epoxy application, or squeegee to achieve a continuous coating. Ensure that loose hairs on the roller are removed before use. When the base coat has reached initial cure then 2nd coat of **DisboPOX 110 SB** can be applied by medium haired roller. Care should be taken to ensure that a continuous film is achieved.

Anti-slip Application

If a slip resistant texture is required, the base coat shall be applied as per the standard application (as per instructions). The base coat should then be dressed with the chosen anti-slip grain **DisboADD 460/480**. This should be done immediately after application. The recommended procedure is to completely blind the base coat i.e. applies excess dressing aggregate to completely obliterate the base coating. Alternatively, the anti-slip grains can be broadcast in a light random dressing to provide a less dense finish. When the base coat has reached initial cure, the excess aggregate should be vacuum cleaned from the surface. The 2nd coat of **DisboPOX 110 SB** can now be applied by medium haired roller as per specification. Care should be taken to ensure that a continuous film is achieved and the rough surface, caused by the aggregates, is completely sealed.

Important Note

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Caparol's technical documentation.

Applicators and operators shall use appropriate personal protection equipment when using this product. The user of the product must test the product's suitability for the intended application and purpose. Users must always refer to the most recent issue of the local Technical Data Sheet (TDS) for the product concerned, copies of which will be supplied on request.

Field service where provided does not constitute supervisory responsibility. Suggestions made by Caparol either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Caparol, are responsible for carrying out procedures appropriate to a specific application.

Maintenance

The service life of a floor can be considerably extended by good housekeeping practices. To maintain the appearance of the floor after application, **DisboPOX 110 SB** must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc.

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Therefore suitable detergents and waxes should be used only. Regular cleaning of **DisboPOX 110 SB** should be carried out using a rotary scrubbing machine with a water miscible cleaning agent or by hot water washing at temperatures up to 50°C will show the best result.

Gloss Stability

In common with all epoxy materials, some slight shade changes may be experienced over the long term when placed in adverse exposure conditions. Such products may fade and chalk when exposed to sunlight and weathering. Any such change in shade is not regarded as being detrimental to performance.

Storage and Handling

6 months when stored in warehouse conditions between 15 - 35°C in the original, unopened packs. The product must be kept in a cool, dry, enclosed, well ventilated space and away from source of heat and ignition. Do not expose to direct sun-light. Containers must be kept tightly closed and always handle with care. Keep out of reach of children.

Disposal

Material and related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Attention should be paid to removing wastage from site in compliance with standard construction site procedure. Only completely containers should be handed in for recycling. Liquid and hardened material which contains organic solvents or other hazardous substances shall be disposed of as paint waste. Uncured product residues are special hazardous waste. Do not empty contents into wadis, drains or watercourses.

Health and Safety

DisboPOX 110 SB is a solvent based product. During application, drying and curing, sufficient ventilation must be provided. Do not use **DisboPOX 110 SB** where contamination of foodstuffs could occur during initial cure.

After full curing, **DisboPOX 110 SB** is physiologically harmless. Please observe the precautionary notices displayed on the container. Use under well ventilated conditions. Do not inhale spray mist. Avoid skin contact. Wear safety gloves, goggles and protective clothing. When working with the product do not eat, smoke or work near a naked flame.

Spillage on the skin should immediately be removed with suitable cleanser, soap and water. If mixed resin meets the skin, it must be removed before it hardens with a resin removing cream followed by washing with soap.

Avoid prolonged inhalation of solvent vapors. Some people are sensitive to epoxy resins, hardeners, and solvents; it should not meet skin and eyes or be swallowed. All respiratory equipment's must be suitable for the purpose and meet appropriate standards. In case contact with eyes, rinse immediately with plenty of water and seek medical advice immediately. The regulations of the local trade association and/or other authorities, regulating safety and hygiene of workers handling epoxy resins must be followed.

Disclaimer

This guideline is given based on the present state of our best scientific and practical knowledge of the products when properly stored, handled and applied under normal conditions in accordance with Caparol's recommendations. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. Caparol's products are considered as semi-finished goods and as such, products are often used under conditions beyond Caparol's control. Caparol cannot guarantee anything but the quality of the product itself.

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