

SCHÖNOX® EPA

Two-Part, Epoxy Based Moisture Mitigation System

suitable on porous, unheated concrete slabs to reduce moisture vapor emission rates from 100% RH or 25 lbs./1000 sq.ft./24 hrs to suitable levels before applying SCHÖNOX underlayments. Only one coat required to penetrate and to fully seal the substrate.

Product characteristics

- solvent-free, 100% solids epoxy
- complies to SCAQMD 1113
- low viscosity
- water proof
- high penetrating
- problem solver on damp concrete (after the concrete is visually dry)
- resistant to chemical loadings
- for interior and exterior use

Applications

- To suppress moisture on unheated, moisture-resistant, porous concrete with residual moisture up to 100% RH or 25 lbs./1000 sq.ft./24 hrs. before applying SCHÖNOX underlayments prior to install flexible coverings as well as wood floor.

Requirements of substrate

- Before applying SCHÖNOX EPA, a Moisture Vapor Emission Rate per ASTM F-1869 or a relative humidity of the concrete, using ASTM F-2170 must be obtained.
- Substrates must be profiled to achieve CSP 2 - 3 prior to the use of SCHÖNOX EPA.
- Subfloors must be porous, smooth, sound, clean and free of any contaminants which may hinder adhesion.
- Approve on porosity doing a water drop test following the standards. Sprinkle water onto the surface, if water forms droplets without absorbing within 2 minutes, the surface is non porous and is probably contaminated with sealers, curing compounds, abatement chemicals or oil. Such invisible contaminants must be removed completely by mechanical methods such as shot blasting.
- Concrete must support a minimum adhesion strength of 150 psi (1 MPa) when tested per ASTM D-4541 (tensile bond test).
- Surface treatments or any "friable" areas of the subfloor must be mechanically removed and the subfloor repaired with water resistant SCHÖNOX underlayments as required.
- Repair non structural cracks using SCHÖNOX PGH following the referring product data sheet. Moving joints must be honored up to the final surface.
- Adhesives and residues have to be removed completely. The complete mechanical removal of cutback (i.e. grinding, sanding, blasting) can be hazardous as old cutback adhesive may contain asbestos. Do not sand or grind adhesive residue. Harmful dust may result. Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Please consult the adhesive manufacturer and all applicable government agencies for rules and regulations concerning the removal of flooring and adhesives that contain asbestos.
- To ensure an ideal, dust-free surface, vacuum the substrate properly using an industrial vacuum cleaner.
- The subfloor surface must be visually dry to ensure a suitable adhesion of the vapor barrier.
- Substrate temperature must be at least 5°F away from the dew point during application and drying to avoid condensation on the surface.
- Do not use moisture mitigation systems on gypsum based substrates.

- Do not use SCHÖNOX EPA where hydrostatic pressure conditions exist or where moisture vapor emissions exceed the recommended levels.
- SCHÖNOX EPA may be used as a migration barrier over abated concrete slabs prior to install SCHÖNOX underlayments. Therefore remove any existing adhesive and abatement residues by mechanical means down to a clean, sound and porous concrete surface prior to the installation of SCHÖNOX EPA. As abatement products/adhesive removers vary, please contact the SCHÖNOX Technical Service for further advice.
- SCHÖNOX EPA may be used as a primer to solidify substrates such as wood, gypsum based substrates or adhesive residues.
- SCHÖNOX EPA may be used to mix a heavy duty, rapid drying epoxy based repair mortar to fill breakouts or create ramps in heavy duty areas. Therefore add the ready mixed SCHÖNOX EPA last to clean, dry silica sand (grain size 1/64" - 1/8") following a mixing ratio of 1 : 12 in parts per weight (i.e. 1/2 gal of ready mixed SCHÖNOX EPA + 55lb of silica sand) and mix thoroughly to a homogenous mix. Apply the mixed epoxy mortar to the clean, vacuumed substrate and compress accordingly using a trowel. Very porous substrates prime with SCHÖNOX EPA prior to apply the epoxy mortar into the fresh primer. Coverage: approx. 75 sq.ft. per unit at the minimum thickness of 3/8". After drying (approx. 12 hours at 65 °F floor temperature) prime with SCHÖNOX SHP prior to install SCHÖNOX underlayments or thin set adhesives as required.
- SCHÖNOX EPA meets or exceeds the requirements of ASTM F3010-13.
- The requirements of the relevant valid standards, guidelines and data sheets apply.

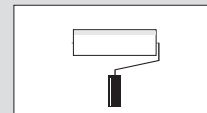
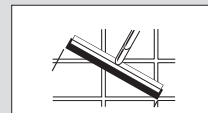
Recommended method of working

- Thoroughly mix the SCHÖNOX EPA resin (component A) with the SCHÖNOX EPA hardener (component B) to a homogenous mix approx. 3 minutes using a low speed mixer (approx. 150 rpm) preventing entraining air. Refill the mixed material into a clean bucket and mix again for approx. 1 minute.
- Apply the mixed SCHÖNOX EPA evenly across the area and spread with a squeegee avoiding moving too fast allowing SCHÖNOX EPA to saturate the concrete surface. After a waiting time of approx. 15 - 30 minutes saturate a 3/8" nap roller and begin to back roll to evenly distribute the epoxy film over the surface avoiding puddles.
- After a drying time of approx. 4 hours (no transfer to the touch at 65°F floor temperature) prime with SCHÖNOX SHP following the referring product data sheet prior to install a SCHÖNOX underlayment or the patching and smoothing compound SCHÖNOX SL.
- If any following materials are not applied within the first 24 hours after drying of SCHÖNOX EPA, then always rough the top surface of SCHÖNOX EPA up using a suitable pad, but without affecting the moisture mitigation properties.
- Do not dilute SCHÖNOX EPA.
- SCHÖNOX EPA is not a crack isolation membrane.
- Clean tools in water immediately after use.

Technical data

- Two Part Epoxy
- Color: transparent-amber
- Density: 1.09 kg/l (mixed material)
- Storage temperature: not below 41°F
- Working time: approx. 40 min. at 65°F
- Working temperature: not below 50 °F floor temperature (recommended: > 65°F, relative humidity 75 %)
- Maximum Coverage Rate: approx. 290 sq.ft. per unit; the finished application must cover the substrate completely without any voids or pinholes to ensure moisture vapor suppression!
- Ready for leveling (after back roll): - after approx. 4 hours at 65°F floor temperature
- Permeance (ASTM E96): ≤ 0.1 perm

All values are approximate at 65 °F floor temperature, are subject to local climatic fluctuations and vary according to the absorbency of the substrate and to the applicator device. Lower temperatures will lengthen the working and curing time, higher temperatures may shorten it dramatically. Do not install underlayment or topping before the substrate has dried thoroughly.



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- Hardened material can only be removed mechanically.
- Note: Mixed material left in the mixing container will generate heat.
- If the concrete surface is sufficiently smooth and level, SCHÖNOX MSP CLASSIC Wood Flooring Adhesive and SCHÖNOX EMICLASSIC, Universal Pressure Sensitive Adhesive or SCHÖNOX ROLL AND GO Rollable Adhesive may be applied directly to SCHÖNOX EPA after curing but within the first 48 hours after the vapor barrier has been installed.

Mixing ratio:

- 6,25 kg / 1.47 gal. component A (resin)
- 3,75 kg / 0.96 gal. component B (hardener)

Packaging

- 2-Component system:
 - 6,25 kg / 1.47 gallons component A (resin) in metal canister
 - 3,75 kg / 0.96 gallons component B (hardener) in metal canister

Storage

- Store in cool, dry, frost-free conditions. Prior to install SCHÖNOX EPA store sufficiently at room temperature
- Shelf life: 18 months unopened

Disposal

- Empty canisters and dispose of in accordance with federal, state and local waste disposal regulations. Pour excess material onto a disposable surface (such as cardboard) or into disposable containers (at a thickness no greater than ¼") and dispose of after curing following the regulations.

VOC Content

- 0g/l (calculated), SCAQMD 1113

LEED

May help contribute to LEED certification of projects in the categories:

- EQc2
Low-Emitting Materials – 1 to 3 points

Environmental Product Declaration (EPD)

- Declaration number:
EPD-DIV-2012111-E

Hazard class

- Component A (resin):
- Signal word: Warning



- Component B (hardener):
- Signal word: Danger



Ingredients

- The resin component (A) contains:
 - reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (σ-mw ≤ 700)
 - oxirane, mono[(C12-14-alkyloxy) methyl] derivs.
- Contains epoxy constituents. May produce an

- allergic reaction.
- For professional use only.

- The hardener component (B) contains:

- benzyl alcohol
- m-phenylenebis(methylamine)
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Risk phrases

- Resin component (A):
 - Causes skin irritation.
 - Causes serious eye irritation.
 - May cause an allergic skin reaction.
 - Toxic to aquatic life with long lasting effects.
- Hardener component (B):
 - Harmful if swallowed or if inhaled.
 - Causes severe skin burns and eye damage.
 - May cause an allergic skin reaction.
 - Harmful to aquatic life with long lasting effects.

Safety phrases

- Resin component (A):
 - Keep out of reach of children.
 - Wear protective gloves/protective clothing/eye protection/face protection.
 - IF ON SKIN: Wash with plenty of soap and water.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Call a POISON CENTER or doktor/physician if you feel unwell.
 - Avoid release to the environment.
 - Dispose of contents and container in accordance with all local regulations.
- Hardener component (B):
 - Keep out of reach of children.
 - Do not breathe dust/gas/vapours/spray.
 - Wear protective gloves/protective clothing/eye protection/face protection.
 - IF ON SKIN: Wash with plenty of soap and water.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Call a POISON CENTER or doktor/physician if you feel unwell.
 - Avoid release to the environment.
 - Dispose of contents and container in accordance with all local regulations.
 - For professional use only.

Carefully read and follow all cautions and warnings on product label. For complete safety information, please refer to the Material Safety Data Sheet, or visit our website at www.schonox.us.

Limitation of Liability

To the best of our knowledge, the technical data contained herein are true and accurate at the date of issuance but are subject to change without prior notice. We guarantee our product to conform to the specifications contained herein. We make no other warranty or guarantee of any kind, express or implied, including merchantability and fitness for particular purpose. Liability, if any, is limited to replacement of the product or refund of the purchase price. Labor or cost of labor and other consequential damages are hereby excluded. SCHÖNOX does not authorize anyone, including SCHÖNOX Representatives, to make any statements which supersede, modify or supplement the information provided on its printed literature or package labels without written confirmation.

The applicable recommendations, guidelines, regulations and safety data sheets are to be observed, together with the recognized architectural and engineering regulations. We guarantee that our products leave the factory in perfect condition. While our recommendations for use are based on tests and practical experience, they can only provide general guidance without any assurance as to product characteristics, since we have no influence over the conditions on site, the execution of the work or the method of processing. This product data sheet supersedes all previous editions.



The SCHÖNOX management system is certified to ISO 9001 and 14001 by DQS.

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