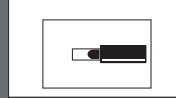




# SCHÖNOX DSP

## Wear rated, cement Based Self-leveling Compound and Concrete Topping

Designed for a variety of applications over suitable concrete from retail environments, restaurants, public buildings, entry ways, offices to warehouse or manufacturing areas with moderate industrial loads. SCHÖNOX DSP provides an extremely dense and durable surface to be sealed or polished in interior and exterior areas. SCHÖNOX DSP can be installed above 1/4" up to 2".



### Product characteristics

- EMICODE EC 1<sup>PLUS</sup> R: very low emission
- for interior and exterior use
- moisture resistant
- self-leveling
- suitable on underfloor heating systems
- low shrinkage
- suitable for castor wheel loadings
- suitable for use as a commercial wear topping in industrial applications (rubber wheeled traffic) above 1/4".
- suitable for polishing above 3/8"
- tested in accordance with ASTM C1708
- exceeds minimum Ff/FI requirements of ASTM and ACI when installed in accordance with the guidelines

### Applications

**SCHÖNOX DSP is suitable for filling, smoothing and leveling of substrates under:**

- suitable sealers, densifiers and coatings when installed as a wear layer or concrete topping

**as well as for filling, smoothing and leveling of unheated, cement based substrates under:**

- SCHÖNOX Moisture Mitigation Systems

### Substrates

**SCHÖNOX DSP is suitable on:**

- concrete, cement substrates (CSP 3 when installed for polishing)

When installed as a wear layer, always follow the 'Recommended Method of Working'!

### Requirements of substrate

- Subfloors must be smooth, sound, clean, dry and free of any contaminants which may hinder adhesion.
- Surface treatments or any "friable" areas of the subfloor must be mechanically removed back to a sound base and the substrate repaired with SCHÖNOX repair compounds as required.
- SCHÖNOX recommends pre-leveling with SCHÖNOX US if the current substrate has significant high and low spots to ensure even installation depths for the SCHÖNOX DSP for better control of aggregates.
- This product is not a vapor barrier and will allow free passage of moisture. Follow the directions of the floor covering manufacturer regarding the maximum allowable substrate moisture content and test the substrate prior to installing SCHÖNOX DSP. Where substrate moisture exceeds the maximum allowed the application of SCHÖNOX MR 18, SCHÖNOX EPA or SCHÖNOX EPA RAPID may be used to suppress residual moisture.
- Old water-soluble adhesives should be removed completely, old water-resistant adhesives should be removed as far as possible. 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. Refer to the Resilient Floor Covering Institute's publication "recommended work practice for removal of resilient floor coverings" for instruction. Prime remaining adhesive residues accordingly.

- The requirements of the relevant valid standards (such as ASTM 2873-13), guidelines and data sheets apply.

### Priming

**■ if installed as a wear layer over suitable substrates such as porous concrete**

prime with SCHÖNOX EPA or SCHÖNOX EPA RAPID (followed by SCHÖNOX SHP) to achieve a non-porous substrate avoiding surface irregularities such as pin holing.

**■ for polishing over properly profiled concrete (CSP 3)**

prime with SCHÖNOX EPA followed by SCHÖNOX SHP to achieve a non-porous substrate avoiding surface irregularities such as pin holing and a suitable physical bond to take the physical loading of the polishing process.

- Repair all cracks at the original substrate with either SCHÖNOX SGH or SCHÖNOX EPA

**Concrete polishing and tooling:** Polishing is a multi-step process typically using a suitable planetary Grinder and Polisher with metal (Diamond impregnated pads of 60-80 grits), transitional (Diamond impregnated pads of 100 grits) and resin stages (Diamond impregnated pads of 100, 200, 400, finer grits as required) prior to using a Micro Polisher (using Diamond impregnated pads of 400, 800, finer grits as required) following the Polishing Guideline of the Sealer and Densifier Manufacturer.

### Mixing ratio

- mix each 25kg / 55lb. bag with 4.5 l / 4.7 quarts of water.
- when installed as a concrete topping, mix with 4.0 l / 4.2 quarts of water.
- we recommend to extend SCHÖNOX DSP with dry, clean aggregate (aggregate is added last) at a layer thickness above 1/2": Type and amount of aggregate used will affect product performance. As qualities of locally available aggregates vary, we recommend to perform tests prior to use on a larger scale. Do not overwater! Foam while mixing, or settling of the sand aggregate while placing, indicates overwatering.

### Recommended method of working

- Using a clean mixing barrel, add SCHÖNOX DSP to cold, clean water to form a homogeneous mixture. Mix thoroughly for approx. 3 minutes using a heavy-duty drill (min. 600 rpm) to obtain a lump-free mix. Pour the mix and spread using a smoothing trowel. Even surfaces are easily achieved using a gauge rake.

### Technical data

- pot life: approx. 30 minutes
- ready for foot traffic: approx. 2 - 3 hours
- ready for covering:
  - after approx. 24 hours at 1/4"
  - after approx. 24 - 48 hours at 3/8" prior to apply suitable sealers or to start polishing
- working temperature: 41°F - 90°F
- coverage per unit:
  - approx. 25 - 30 sq.ft. at 1/4" (depending on substrate conditions and aggregate used)
- compressive strength (ASTM C109):
  - 7250 psi / 43 N/mm<sup>2</sup> / 580 kg/cm<sup>2</sup> after 28 days
  - 2000 psi / 12 N/mm<sup>2</sup> / 135 kg/cm<sup>2</sup> after 1 day
- flexural strength (ASTM C348):
  - approx. 1500 psi / 10 N/mm<sup>2</sup> after 28 days
- tensile strength (ASTM C1583)
  - above 450 psi / 2.5 N/mm<sup>2</sup> / after 3 days
- initial Set (ASTM C191): approx. 80 minutes
- final Set (ASTM C191): approx. 95 minute
- UL-classified in accordance with ASTM E84 (ANSI/UL 723):
  - Flame Spread 0; Smoke Development 0
- abrasion resistance (ASTM D4060):
  - approx. 1.4 at 28 days
- cured density: 121 lbs. / cu.ft.

All values are approximate, are subject to local climatic fluctuations based upon conditions at 70°F with atmosphere of less than 65 % relative humidity following the recommended mixing ratio. Do not install underlayment or topping before the substrate has dried thoroughly.



# SCHÖNOX DSP

- Avoid contact to vertical structures by putting in an edge strip such as SCHÖNOX FOAMTAPE or SCHÖNOX RS-50.
- Protect curing SCHÖNOX DSP from high ambient temperatures, direct sunlight, draughts and ensure an adequate air circulation.
- **The cured surface of SCHÖNOX DSP must be protected from any type of contamination by installing a suitable coating.** SCHÖNOX DSP accepts most penetrating hardeners and densifiers and a wide variety of sealers, as well as epoxy and urethane coatings (perform mockup tests to verify optimal time for sealing or coating). Always follow the installation guidelines of the coating manufacturer.
- **SCHÖNOX DSP can generally be stained, colored or aggregated at the discretion of the installer/specifier.** Type and amount of colors and suitable aggregates (such as DSP DecoMix) used may affect the performance (such as self leveling properties) of SCHÖNOX DSP. Always test in a small, well defined area.
- Tool marks can be expected to be discovered in the polishing process as SCHÖNOX DSP are not intended to be perfectly homogenous in appearance and optical variations of the surface should be expected.
- All cement based products have the potential for cracking. Cracking, such as hair line cracking cannot be considered as a product defect or installation failure. The wear surface of SCHÖNOX DSP is not intended to be perfectly homogenous in appearance. Therefore optical variations of the surface should be expected.
- Protect curing SCHÖNOX DSP from high ambient temperatures, direct sunlight, drafts and ensure an adequate air circulation.
- Control joints, construction joints, and saw cuts should be honored through the system.
- i) Grout coats, densifiers, sealers, or coating systems are all recommended and important aspects of the project. The level of protection should be discussed and agreed upon by the installation team and end user.
- ii.) The installation and performance of grout coats, densifiers, and sealers are set by the manufacturer of those products.
- iii.) Grout coats and full aggregate exposer can decrease the visual imperfections related to cracking; however, grout coats cannot eliminate cracking.
- iv.) Maintenance plans should be discussed and agreed upon by the installation team, end user, maintenance staff and manufacturer of choice. Visual issues

related to maintenance of the product fall on the responsibility of the manufacturer of grout coats, sealers, densifiers, etc. .

- Clean tools in water immediately. See technical bulletin for detailed information.

## Packaging

- 25kg / 55lb. net weight in paper bags

## Storage

- Store in cool and dry conditions.
- Shelf life: 12 months unopened.
- End of shelf life does not generally indicate the end of the products suitability for the intended use. Always test in a small area.

## Disposal

- Empty packaging and dispose of in accordance with federal, state and local waste disposal regulations.

## VOC Content

- 0g/l (calculated), SCAQMD 1113

## LEED

Contributes to LEED v4.1 certification of projects in the categories:

- EQc2 - 3 points  
Low-Emitting Materials
- MRc1 - up to 2 points  
Life-Cycle Impact Reduction
- MRc2 - 1 point  
Environmental Product Declaration
- MRc4 - 1 point  
Material Ingredients

## Instructions

- Always install an adequate number of properly located test areas, to include the complementary products, to determine the suitability of the product for its intended use.
- Low substrate temperatures and/or high ambient humidity require longer drying times.

## Precautions

- SCHÖNOX DSP contains Portland cement and sand aggregate. Avoid eye and skin contact. In case of contact, rinse immediately with plenty of water. In case of contact with eyes seek additional medical advice. Mix in a well-ventilated area and avoid breathing powder or dust.
- Never mix with cement or additives other than SCHÖNOX approved products. Observe the basic rules of concrete work. Do not install below 41°F surface temperature. Install quickly if substrate is warm.

Prior to each use of any SCHÖNOX product, the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at [www.hpsubfloors.com](http://www.hpsubfloors.com), or by calling the HPS SCHÖNOX Technical Service Department at 855-391-2649. Nothing contained in any SCHÖNOX materials relieves the user of the obligation to read and follow the warnings and instruction for each SCHÖNOX product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to product use. This product data sheet supersedes all previous editions.



Management system certified to ISO 9001 and 14001 by SQS.

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