

**PIGMENTED 3-COMPONENT POLYURETHANE TOP SEALER**

**DESCRIPTION**

PU-BETON 4080 is a solvent-free, pigmented, 3-component polyurethane top sealer. As finish sealer for surfaces based on PU-BETON 4006/4009 and for sealing sockets or covings based on PU-BETON 4012. PU-BETON 4080 is usually used on scattered coatings based on PU-BETON 4006 or PU-BETON 4009 for slip resistant, nonporous surfaces. The mixed product is applied with a rubber coating knife on the sand bed. Distribute evenly with a velour roller using criss-cross strokes. PU-BETON 4080 consists of reactive component and a mineral component which are carefully aligned, resulting in a slightly textured, matt, nonporous surface. The coating is resistant to abrasion and offers good resistance to many chemicals, especially to aqueous salt solutions, different acids and bases, as well as to solvents. After curing the chemical resistance of PU-BETON 4080 equals the other PU-BETON systems. PU-BETON 4080 CLEAN is a 3-component polurethane sealer with a preventive protection against bacterial contamination. This assists the production of permanently hygienic surfaces, even between the necessary cleaning and disinfection cycles. Note: The processing information and the technical data of PU-BETON 4080 CLEAN do not differ from the standard product. Depending on the colour slight colour tone alterations may occur. This will not affect any technical properties of the material though. PU-BETON-coatings are functional coatings. The optical appearance may not always be consistent. Differences in colouring, gloss, shoulders, and fastening grooves may become visible, especially on smooth coatings (R9).

**RECOMMENDED FOR**

- ▶ As system product top sealer for PU-BETON coating systems, like e.g. PU-BETON 4006 or PU-BETON 4009.
- ▶ As slip resistant scattered coating especially suitable for wet areas with increased demands to the resistance to temperature and chemicals, e.g. dairy farms, slaughter houses, breweries, and other areas in the food production industry.
- ▶ As top sealer for skirtings based on PU-BETON 4012.

**ADVANTAGES**

- ▶ Robust and abrasion resistant
- ▶ Resistant to hot water
- ▶ Solvent-free
- ▶ Pigmented, matt surface
- ▶ Resistant to water and chemicals
- ▶ Especially for slip resistant coatings

**TECHNICAL CHARACTERISTICS**

Characteristic	Test Result	Test Method
Density (Components A+B+C)	1.53 kg/lt	EN ISO 2811-2 at 68 oF (20 oC)
Color	Beige, red, green, grey	
Solid content	> 99 %	KLB - Method
Weight loss	< 2.0 % after 28 days	
Water absorption	< 0.2 weight %	DIN 53495
Processing time at 59 oF (15 oC)	20 minutes	
Processing time at 68 oF (20 oC)	15 minutes	
Processing time at 77 oF (25 oC)	10 minutes	



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## TEHNICAL CHARACTERISTICS

Characteristic	Test Result	Test Method
Processing temperature	Minimum 59 °F (15 °C) – Maximum 25 °F (77 °C) room and floor temperature	
Curing time at 50 °F (10 °C)	20-30 hrs (Accessibility)	
Curing time at 68 °F (20 °C)	16-24 hrs (Accessibility)	
Curing time at 77 °F (25 °C)	12-18 hrs (Accessibility)	
Curing	1-2 days for mechanical load at 68 °F (20 °C) 2 days for chemical resistance at 68 °F (20 °C) After 8-10 hours, but not longer than 36 hours at 68 °F (20 °C)	
Further coatings		

The aforementioned results are related to average laboratory test results. In reality the climate changes, such as temperature, moisture and surface porosity may change these results.

## DIRECTIONS FOR USE

**Surface Preparation:** The surface to be coated has to be levelled, with grip, has to have adequate tensile and compressive strength, has to be clean, free from laitance and dusting parts, as well as any contamination. Materials impairing adhesion, such as e.g. grease, oil, or paint residues must be removed using suitable methods. The substrate must have a sufficiently high strength for the intended use as well as for the coating. Suitable is concrete, minimum quality of C25/30 according to DIN EN 206 cement screed, and polymer-modified cement screeds, CT-C30-F5 at least, bonded, in a layer thickness of 60 and 30 mm respectively, according to DIN 18560 part 3. Screeds as separating layer or insulation, polymer-modified, CT-C40-F5 at least, with a layer thickness > 65 mm, according to DIN 18560 part 4. Other substrate is not, or is generally not suitable. The surface to be coated must be prepared mechanically, preferably by shot-blasting. The surface strength must then be at least 1.5 N/mm<sup>2</sup>. Apply fastening grooves at closing-off edges, passageways, and so on, 6 - 10 mm deep and wide. For concrete, the moisture content must not exceed 6 CM-%. The possibility of moisture ingress from the rear must be permanently excluded. Please refer to the advice issued by the trade associations, e.g. the current edition of BEB-worksheets KH-0/U and KH-0/S, as well as the product information of the recommended KLB-Base Coat PU-BETON 4050 Grundierung. On areas with increased thermal exposure use only PU-BETON 4050. The prepared area has to be primed accurately, saturated, and free of pores. If the substrate hasn't been sealed completely, bubbles and pores may appear due to rising air. Conduct a trial if in doubt. If necessary ask for a consultancy. Subsequently apply PU-BETON 4006, PU-BETON 4009 or PU-BETON 4011 Grip in the right layer thickness. PU-BETON 4080 is usually suitable for completely with quartz sand scattered substrate. Excess sand has to be removed from the surface and may not be soiled before the top sealer will be applied. Wear clean shoes or overshoes when working on sanded areas.

Mixing: Combi-trading units will be supplied in the correctly measured mixing ratio. Processing and material properties can only be granted when using the provided blend of the 3

components. First of all empty the binding agent components (Components A + B) completely in a clean container and blend with a slow speed mixer (200 - 400 r/pm) thoroughly. Blend for approx. 1 minute for a material that is homogeneous and free of streaks. Blending in Component C should be carried out with a compulsory mixer for a consistent mortar quality. Add the premixed binding agent into the compulsory mixer, then add Component C. Mix for a material that is homogeneous for approx. 3 minutes at 68 °F (20 °C). Lower temperature may increase, higher temperature may decrease the blending times.

Note: Pay attention to consistent blending times. Process complete units only! Inaccurate mixing ratios will lead to useless results. Note the mixing ratio when using double units (see "Composition")!

During mixing the temperature of the components should be between 59 - 68 °F (15 - 20 °C). Blend continuously and thoroughly because of the short-term processing time. Therefore doubling the amount of the material is not recommended.

Mixing ratios:

A:B:C= 100:100:180 parts by weight

Processing/Handling:

Process the material immediately on the prepared substrate. Excess sand has been removed. Apply the mixed material in portions and distribute on the prepared substrate with a foamed rubber slider or a rubber coating knife. Note for an even application. Re-roll with a velour roller after a short time delay. When sealing smooth, not scattered surfaces, apply the material with a rubber coating knife and pull off over the grain. Re-roll with a textured roller (medium) afterwards. Always work "fresh-in-fresh" to avoid any shoulders. Divide working areas before starting to work, if necessary with adhesive tape, for a clean connecting field. Floor and air-temperature must not fall below 59 °F (15 °C) and/or humidity must not exceed 40-85 %. The difference in floor and room temperature must be less than 37.4 °F (3 °C) so the curing will not be disturbed.

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If a dew- point situation occurs adhesion may malfunction, curing may be disturbed, and spotting may occur. Curing time applies to 68 °F (20 °C). Lower temperature may increase, higher temperature may decrease the curing and processing time. If working conditions are not complied with, deviations in the described technical properties may occur in the end product.

Build-up of Coats:

Coating based on PU-BETON 4006/4009 with slip resistance grade R11/12/13

- Saturated base coat with the system based PU-BETON 4050, consumption 0.4 - 0.5 kg/m<sup>2</sup>.
- Use PU-BETON 4012 for triangular or concave coverings. For a side length or radius of 5 cm, consumption of approx. 2.2 - 2.8 kg per running meter. Also suitable for filling larger holes or local separations.
- If necessary: Larger uneven areas may be filled with PU-BETON 4006 and be scattered with fire-dried quartz sand 0.7/1.2 mm.
- Apply the PU-BETON 4006 with a spiked coating knife in layers of 6 mm, respectively PU-BETON 4009 in layers of 9 mm. Vent with a spiked roller.
- Scatter completely with fire-dried quartz sand, grain size 0.3/0.8 mm or 0.7/1.2 mm. After curing sweep off or vacuum until no more sand is released.
- Apply PU-BETON 4080 with a rubber squeegee and roll with a velour roller using criss-cross strokes. Consumption: approx. 0.650 - 0.900 kg/m<sup>2</sup>. Work fast and seamless.

It is mandatory to stay within the recommended consumption for the slip resistance grade.

**COVERAGE**

Approx. 0.650 -0.900 kg/m<sup>2</sup> at 5-7 mm.

**SPECIAL CONSIDERATIONS**

To remove fresh contamination and to clean tools, use thinner VR 28 or VR 33 immediately. Hardened material can only be removed mechanically.

The product is subject to the hazardous material-, operational safety-, and transport-regulations for hazardous goods. Refer to the DIN-Safety Data Sheet and the information on the labelled containers!

PU 4080 CLEAN: Use the biocide product with caution. Always read the label and the product information before use.

GISCODE: PU 40

Indication of VOC-Content: (EG-Regulation 2004/42), Maximum Permissible Value 140 g/l (2010,II,j/wb): Ready-for-use product contains < 140 g/l VOC.

Contact PENETRON ROMANIA. for additional information, regarding your project.

**PACKAGING**

PU-BETON 4080 consists of the following components:

Standard-Unit	PU 40801 Sale-Unit	Component A	2.0 kg
	PU 40801 Sale-Unit	Component B	2.0 kg
	PU 40801 Sale-Unit	Component C	3.6 kg
Total quantity			7.6 kg

**STORAGE / SHELF LIFE**

Store in dry and frost-free conditions. Ideal storage temperature is between 59 - 68 oF (15 - 20 oC). Bring to a suitable working temperature before application. Tightly re-seal opened containers and use the content as soon as possible. When properly stored in a dry place in unopened and undamaged original packaging, shelf life is 12 months.

**SAFE HANDLING INFORMATION**

Avoid skin and eye contact. If contact is made, flush areas with lots of water and seek medical advice. Protective gloves, mask and goggles should be worn. For further information please refer to Safety Data Sheet . KEEP OUT OF REACH OF CHILDREN.

**CERTIFICATION**

Classification of the fire behaviour in combination with PU-BETON coating, according DIN EN 13501-01:2010-01: Bfl-s1.

Suitable for use in foodstuffs according § 31 para. 1, German Food and Feed Code (German law LFGB).

Slip resistance grade R10 possible, according to DIN 51130 and BGR 181.

Bacteriostatic activity according to ISO 22196:2011-08 and JIS 2801:2000.

Within the system with verification of applicability as industrial kitchen flooring.

Please ask for the tested system structure.



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 15  
 PU4080/PU4080CLEAN-V3-072015  
 DIN EN 13813:2003-01  
 Synthetic resin screed mortar  
 DIN EN 13813: SR-B1.5-AR0.5-IR20  
 Fire behavior: Bfl-s1

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Emission of corrosive substances: SR  
Wear resistance BCA: AR 0.5  
Adhesive tensile strength B 1.5  
Impact resistance: IR 20

**WARRANTY - DISCLAIMER**

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