

Technical Data Sheet

Product description	Colorful, two-component, polyurethane, low-viscosity resin. Ideal for high build floorings and protective coatings with flexible properties.		
Use	<ul style="list-style-type: none">• Possible application of the material with adjustable coating thickness,• Material for internal use as a bonding coating,• Can be used anywhere where high flexibility of the surface and the ability to stress transfer are required,• The resin can be used in sprinkled systems with adjustable degree of slip resistance.		
Properties	<ul style="list-style-type: none">• Very high intercoat adhesion ,• Ability of crack-bridging,• Possibility of the coating thickness, flexibility and slip resistance properties adjustment,• High chemical resistance,• Good resistance to abrasion,• Good mechanical parameters (high flexibility, tensile strength, bending strength),• Ensures hydrophobic properties,• Low viscosity,• Easy application,• Application versatility,• Frost resistance.		
Physical properties of Siconofloor PU-SB			
Form	Component A modified polyol		
	Component B isocyanate hardener		
Density (according to PN EN ISO 1675)	Component A	1.05~1.2 g/cm ³	
	Component B	0.99~1.15 g/cm ³	
Suitability for use	35 minutes at 20°C		
Theoretical consumption of the blend	Minimum 2.5 kg/m2 in case of using as a smooth screed		
Color and odor	Component A colorful and odorless		
	Component B liquid with a characteristic brown color		
Hygiene tests	Meets the requirements; Hygienic Certificate No. HK/B/0757/02/2015		
Practical use of the blend	It strongly depends on the use, aggregate fractions, application technique, application conditions, roughness degree		
Curing time	Light loads 24h at 25°C		
	Full load	7 days	
Viscosity (Brookfield DV-II). The test was conducted at 20°C using 04 spindle and 20 RPM rotational speed.	Component A	700~890 mPa*s	
	Component B	200~260mPa*s	
Mechanical properties of Siconofloor PU-SB			
Dust dryness		12 hours at 20°C	
ShA hardness (after 7 days)		80°	
ShA hardness (after 7 days)		50°	
Application			
Substrate preparation	The substrate must have sufficient compressive strength (minimum 25 N/mm²). The surface must be flat, slightly rough, dark and dry, cleaned of all contaminants. "Pull off" test should not give a result below 1.5 N/mm². If in doubt, make a reference area. Parts of the substrate with insufficient strength, cement slurry and fragments contaminated with oils must be removed mechanically, e.g., by means of grinding or milling. Before the material application, the substrate must have open pores. Immediately before the material application, the substrate must be dusted and vacuumed.		
Priming conditions	Substrate temperature should be +5~30°C. Please note, that the lower the temperature, the longer the process of SICONOFLOOR PU-SB curing. Ambient temperature should be +5~30°C. Substrate moisture content should be a maximum of 5%. Relative humidity of the air should be a maximum of 80%. Temperature of the substrate and uncured flooring must be at least 3°C above the dew point. freshly applied SICONFLOOR PU-SB must be protected from moisture and direct water impact for at least 24 hours after the end of the application. In the case of the need for artificial heating, do not use gas, oil, paraffin nor other fossil fuels heaters. During their operation, those devices emit large amounts of water and carbon dioxide in the form of water vapor, which significantly interfere with the curing of the resin. Use only electric heaters for heating.		
Application methods	First mix A component, then add B component, mix the components until a uniform consistency, but not for less than 3 minutes. After the initial mixing, the material is to be poured into a separate container and the mixing must be continued. Quartz sand (best of 0.1~0.3mm fraction) may be added to the mixed A and B components, if required. Please note that the addition of an aggregate can only be done in self-distribution systems and adding it causes deterioration of the self-distribution properties and a tendency to bleed. The material must be mixed for other 2 minutes until a homogeneous blend. Stirring ratios of Component A and Component B are indicated on the packaging and they must not be changed. Changing the proportions results in a product with characteristic		

	different from the ones declared by the manufacturer. Over mixing can cause air entrainment and therefore it should be avoided. Use low speed electric stirrer for the resin mixing (300 ~ 400 rpm) or another suitable equipment. No foreign substances such as solvents can be added to the resin.
Self-distributing system (for internal use)	Apply on cleaned and primed substrate (SICONOFLOOR GF-E substrate) SICONOFLOOR PU-SB to the desired thickness using a trowel or squeegee on special teeth. So distributed resin must be bleed using a roller with spikes. Light loads are possible after 24 hours from the of the last layer application. Wash tools with acetone or xylene immediately after use. Hardened or cured material can only be removed mechanically. Please remember about the need of applying a varnish sealing the whole system, otherwise there is a risk of the coating yellowing.
Sprinkled system (anti-slip, for internal use)	Apply properly mixed resin on the hardened, primed and sprinkled substrate using a metal trowel until evenly distribution of the resin on the desired surface. So distributed material should be sprinkled with the aggregate of the desired fraction to fully cover the resin (invisible colorful spots after SICONOFLOOR PU-SB material). After a minimum of 24 hours application of Sikafloor PU-SB as a varnish on the sprinkled system can be started. Excess of aggregate which did not bind with the resin must be carefully swept, so there were no non-grain aggregate on the flooring. The material after thorough components mixing should be applied using a metal trowel or an appropriate chemical resistant rubber trowel, depending on the desired degree of roughness. Apply the material until the total flooring coating with an even coating of resin. So prepared surface is left to cure. Light loads are possible after 24 hours from the of the last layer application. Please note that it is necessary to apply varnish closing the entire system.
Conditions of the system components storage	Store it in a dry place at +5~30°C. Components A and B in a liquid state are the agents causing water pollution and should not get into drains, soil and watercourses. At the cured state the resin is environmentally neutral. It is unacceptable to store components in open buckets.
Comments and recommendations	
Health and safety conditions	Use personal protective equipment when working with resins. This equipment is precisely listed in the Material Safety Data Sheets of SICONOFLOOR PU-SB material components available upon request. Adequate ventilation must be ensured when working in cramped or confined spaces and when drying. Do not weld nor approach naked flame sources, when working. Use the illumination lamps with appropriate protections. Detailed information concerning health, safety, and ecological data, material toxicological properties data, etc. is available in the Material Safety Data Sheet of SICONOFLOOR PU-SB. Do not allow contact with the skin. Avoid inhaling vapors of the heated material. Avoid contact of the individual components with acids, strong oxidizing agents, alkalis. All employees should be thoroughly trained in the handling of epoxy resins and curing agents, in terms of the existing threats. Do not assign work with resins to allergy sufferers. Use protective gloves and goggles in case of the resin splashes risk. After each resin contact with the skin, wash your hands with water and a mild detergent; do not use benzene, toluene or carbon tetrachloride! For hygiene reasons, do not eat, drink, nor smoke in the workplace. It is unacceptable to leave buckets with resin in open containers.
Final remarks	The included technical specifications are based on laboratory tests. Actual measurements results may vary from the enclosed ones, due to circumstances beyond the control of Sicon LTD. All information is provided in good faith, taking into account the current state of the art and the experience gained. The manufacturer advises that the color of the executed flooring may vary. The resulting phenomenon does not indicate any defect or reduced technical parameters of the flooring. Any discoloration may occur due to the working or drying methods. It is recommended to execute certain surfaces with materials originating from one production run only. The product documentation provides for a general information applicable under certain conditions. It is recommended that before using the product on a large scale, the purchaser tests it under specific construction environment conditions. The supplier has no control over the use, methods of application and execution conditions occurring at the construction site and therefore no responsibility of the supplier for the final effect of the application may arise from these instructions. Recommendations of Sicon partners that differ from the information included in the Safety Data Sheet shall apply only in the case of their written confirmation. Date of issue: 01/2016 All previously issued Siconofloor PU-SB safety data sheets shall expire on the date of issue of this sheet.