

Product technical sheet:

Description of the product	Coloured, two-component low-viscosity epoxy resin. It is characterised by resistance to UV radiation. It is ideal for thick layer floors and protective coatings with flexible properties.		
Application	<ul style="list-style-type: none">• The possibility of applying material with an adjustable layer thickness,• Material for indoor use as a structural layer,• It can be used wherever high flexibility of the surface and the ability to transfer stresses are required,• Resin can be used for sprinkled systems with an adjustable degree of anti-slip.		
Properties	<ul style="list-style-type: none">• Very high adhesion between layers,• Possibility of bridging scratches and cracks in the substrate,• Adjustable layer thickness, elasticity and anti-slip properties,• Resistant to UV radiation,• High chemical resistance,• Good resistance to abrasion,• Good mechanical characteristics (high flexibility, tensile strength, bending strength),• Provides hydrophobic properties,• Ease of application,• Versatility.• Frost resistance,		
Physical properties of Siconofloor PU-SB-UV			
Form	Component A modified polyol		
	Component B isocyanate hardener		
Density (according to PN EN ISO 1675)	Component A for RAL 7040	~1.5 g/cm³	
	Component B	~ 1.1 g/cm³	
Pot life	45 minutes at 20°C		
Theoretical mixture consumption	Minimum 2.2 kg/m² when used as a smooth screed		
Colour and odour	Component A coloured and odourless		
	Component B transparent with a characteristic odour		
Hygiene tests	Complies with requirements;		
Practical mixture consumption	Strongly depends on the intended use, aggregate fraction, the application technique, application conditions, and the degree of roughness.		
Curing time	Light loads after 24 hours at 25°C		
	Full load capacity	7 days	
Mechanical properties of Siconofloor PU-SB-UV			
Dust dryness		12 hours at 20°C	
ShA hardness (after 7 days)		~ 80°	
ShA hardness (after 7 days)		~ 55°	
Application			
Preparation of the substrate	The substrate must have sufficient compressive strength (minimum 25 N/mm²). The surface must be level, slightly rough, strong and dry, and free from non-bound particles. The "pull off" test should not give a result of less than 1.5 N/mm². If in doubt, apply in a reference area. Fragments of understrength substrate, cement milk and fragments contaminated by oils must be removed mechanically, e.g. by shot blasting or milling. The substrate must have open pores before the material is applied. Before the material is applied, the substrate must be dusted and vacuumed.		
Application conditions	The substrate temperature should be +5~30°C (optimum +10-29°C). Note that the lower the temperature, the longer it takes for SICONOFLOOR PU- SB UV to cure. The ambient temperature should be +5~30°C. The moisture content of the substrate should be 5% maximum. The relative humidity of the air should be a maximum of 80%. The temperature of the substrate and the uncured flooring must always be 3°C higher than the dew point temperature. Newly laid SICONOFLOOR PU-SB UV must be protected from moisture and direct action of water for at least 24 hours after the application has finished. If artificial heating is required, gas, oil, paraffin or other fossil fuel heaters should not be used. During operation of such equipment, large amounts of water and carbon dioxide are released as steam, which significantly interfere with the curing process of the resin. Only use electric heaters for heating.		
Application methods	Mix component A initially, then add component B (mixture ratio 100A:34B), mix the ingredients until a homogeneous consistency is achieved, but not less than 3 minutes. After initial mixing, transfer the material into a separate container and continue mixing. The mixing ratios of component A and component B are indicated on the packaging and must not be changed. A change in the ratio will result in the product having characteristics different from those declared by the Producer. Excessive mixing may cause aeration of the resin and should therefore be avoided. Use a low speed electric mixer (300 to 400 revolutions per minute) or other suitable equipment to mix the resin. No foreign substances such as solvents should be added to the resin.		
Self-levelling (for indoor use)	On a cleaned and primed substrate (SICONOFLOOR GF-E primer), spread SICONOFLOOR PU-SB UV to the required thickness using a trowel or squeegee with special teeth. The distributed resin must be deaerated using a spiked roller. Light loads are possible 24 hours after the last layer application is complete. After finishing work,		

	tools should be cleaned with acetone or xylene immediately after use. Hardened or bound material can only be removed mechanically.
Sprinkled system	Apply a properly mixed resin, e.g. Siconofloor PU SB, on a hardened, primed and sprinkled substrate with a metal trowel until the resin is evenly distributed on the desired surface. The material distributed in this way should be sprinkled with aggregate of the desired fraction until the resin is fully covered. After at least 24 hours, SICONOFLOOR PU-SB UV can be applied as a varnish on the sprinkled system. The excess aggregate that has not bound with resin should be thoroughly swept away so that no loose aggregate grains are left on the floor. After thorough mixing of the components, the material should be applied with a metal trowel or a suitable chemical resistant rubber trowel, depending on the desired degree of roughness. The material should be applied until the floor is completely covered with a uniform layer of resin. The surface prepared in this way should be left until it is fully hardened. Light loads are possible 24 hours after the application of the final layer is complete. Remember that it is necessary to apply varnish to the entire system.
Storage conditions for kit components	Store in a dry place at +5~30°C. Components A and B in the liquid state are water-polluting agents and should not enter sewage systems, soil or water courses. The resin in the hardened state is neutral to the environment. It is not permitted to store components in open buckets.
Comments and recommendations	
Health and safety conditions	Personal protective equipment must be used when working with resins. These measures are precisely listed in the Material Safety Data Sheets of SICONOFLOOR PU-SB UV material components, available on customer's request. When working in confined or enclosed spaces, and during drying, adequate ventilation must be provided. Do not weld or expose open flames during the work. Use lighting lamps with the appropriate protection. Detailed information on health, safety and environmental data, toxicological properties of the material, etc. is available in the Material Safety Data Sheet for SICONOFLOOR PU-SB UV. Do not allow contact with the skin. Avoid breathing vapours from heated material. Do not allow individual components to come into contact with acids, strong oxidisers, alkalis. All employees should be thoroughly trained in the handling of epoxy resins and hardeners for existing hazards. Allergy sufferers must not be commissioned to work with resins. Protective gloves and goggles must be worn if there is a risk of resins splashing. Always wash your hands with water and mild cleaning agents after contact with the skin. Do not use benzene, toluene or carbon tetrachloride! For hygiene reasons, do not consume food or drinks in the workplace and do not smoke. It is not allowed to leave buckets of resin in open containers.
Final remarks	These specifications are based on trials and laboratory tests. The practical results of the measurements may differ from those provided, due to circumstances beyond the control of Sicon. All information is given in good faith and takes into account current knowledge and experience. The producer indicates that the colour of the finished floor may vary. This phenomenon does not indicate a defect in the floor or reduced technical specifications. Possible discolouration may occur due to the way the work and drying are performed. It is recommended that particular areas be covered from batches of material from one production run. The product documentation is general information, appropriate under certain conditions. It is recommended that the purchaser carry out an application test under specific construction environmental conditions prior to large-scale application of the product. The supplier has no influence on the types of application, application methods or execution conditions on the site, therefore these instructions may not be held responsible for the end result of the application Recommendations of Sicon's associates that deviate from the information in the technical sheet are mandatory only if they are confirmed in writing. Release Date: 07/ 2019 All previously issued sheets of the Siconofloor PU-SB UV system shall expire on the date of issue of this sheet.