Technical data sheet

Product description	Colourless, two-component elasticised solvent free, polyurethane low viscosity resin. Ideal for “Stone Carpet” type systems as structural and sealing coating.
	• Impregnation and reinforcement of all types of mineral substrates, • Possibility of filling the material, as a high build, transparent resin screed without fillers, • Material to be used as structural and sealing coating.
Properties	• Very high intercoat adhesion, • Good chemical resistance, • **High resistance to UV radiation,** • Good resistance to abrasion, • Good mechanical parameters (hardness, tensile strength, bending strength), • Ensures hydrophobic properties, • Low viscosity, • Easy application, • Frost resistance, • Floor made in sealed version is easier to keep clean • Application versatility.

Physical properties of Siconofloor CS-PU		
Form	Component A light yellow liquid, modified polyurethane resin	
	Component B transparent liquid, curing agent	
Suitability for use/Processing time	15 minutes at temperature of 20ºC	
Hygiene tests	Meets the requirements;	
Curing time	5 h at temperature of 20ºC, light load after 24 h at 20ºC:	
	Full load	7 days
Practical use of the blend	It strongly depends on the use, aggregate fractions, application technique, application conditions, roughness degree: see the system data sheet.	
Viscosity (Brookfield DV-II). The test was conducted at 20ºC using 04 spindle and rotational speed. 20 RPM.	Component A	3510-3530 mPa*s
	Component B	760-780 mPa*s

Mechanical properties of Siconfloor CS-PU	
Dust dryness	5 hours at temperature of 20ºC
ShD hardness	69,0

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.
Application conditions	Substrate temperature should be 5~40ºC. Please note, that the lower the temperature, the longer the process of SICONOFLOOR CS-PU curing. Ambient temperature should be 5~40ºC. 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. The freshly applied SICONFLOOR CS-E must be protected from moisture and direct water impact for at least 24 hours after the end of the application. The formation of milky spots on the surface indicates contact of the fresh material with moisture resulting in a discrepancy between the of properties of the final product and the properties declared by SICON Sp z o.o. Sp.K. 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 vapour, 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. Quartz sand may be added to the mixed A and B components, if required, mix 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 characteristics different from the ones declared by the manufacturer. Over string 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.
Resin screed	Spread SICONOFLOOR CS-PU along with appropriate aggregate using battens of steel, best on guide rails. After a short time, the mortar must be compacted and levelled with fingers or a mechanical float (20-90 rpm) with blades coated with chemical resistant material. The proportions of SICONOFLOOR CS-PU resin to the aggregate depends on the aggregate grain size, but the most commonly 4% of resin weight of the aggregate is used. Wash tools with acetone or xylene immediately after use. Hardened or cured material can only be removed mechanically.