

Technical sheet

Product description	Colourless, two-component, solvent-free, epoxy resin with low viscosity. Perfect for 3-D flooring.	
Application	<ul style="list-style-type: none">• Making 3-D floors,• The possibility of embedding materials, graphics, stones, etc.• Possibility of pouring the material as a thick, transparent resin screed without fillers,• Material for use inside buildings as a construction and closing layer.	
Properties	<ul style="list-style-type: none">• Very high adhesion between layers,• High degree of transparency,• High degree of gloss,• Good chemical resistance,• Good abrasion resistance,• Good mechanical parameters,(hardness, bending strength, tensile strength)• Provides hydrophobic properties,• Low viscosity,• Low resin shrinkage,• Ease of application,• Frost resistance,• Versatility of applications.	
Physical properties of Siconofloor EPOXY GLOSS		
Character	Component A modified epoxy liquid	
	Component B amine hardener	
Density (according to (PN EN ISO 2811-2)	Component A	1.08-1.13 g/cm ³
	Component B	0.99-1.00 g/cm ³
Working life (pot life)	25-30 minutes for a temperature of 20°C	
Colour and smell	Component A transparent and odourless	
	Component B liquid with a characteristic smell	
Hygiene tests	Meets requirements;	
Curing time	Light loads after 72 h at 25°C:	
	Full load capacity	10 days
Practical consumption of the mixture	Strongly depends on the intended use, application technique, application conditions and the degree of roughness of the substrate.	
Viscosity (according to ISO 3219) for 25°C	Component A	750~850 mPa*s
	Component B	155~215 mPa*s
Mechanical properties of Siconfloor EPOXY GLOSS		
Dust dry	72 hours at a temperature of 20°C	
ShA hardness (after 10 days)	90.4°	
ShD hardness	80.0°	
Application		
Preparation of the substrate	The substrate must have sufficient compressive strength (minimum 25 N/mm²). The surface must be even, slightly rough, strong and dry, free from loose particles. The “pull off” test should not give a result below 1.5 N/mm². If in doubt, a reference field should be made. Fragments of the substrate of insufficient strength, cement laitance and fragments contaminated with oils or other separating substances must be removed mechanically, e.g. by shot peening, grinding or milling. The substrate must have open pores before the material is applied. Immediately before application of the material, dust and particulate matter should be removed from the substrate.	
Application conditions	The temperature of the substrate should be +5~30°C (optimal +10-29 °C). It should be remembered that the lower the temperature, the longer the curing process of SICONOFLOOR EPOXY GLOSS. Ambient temperature should be +5~30°C. Substrate humidity should be max 5%. Relative air humidity should be a maximum of 80%. The temperature of the substrate and uncured flooring must always be 3°C above the dew point temperature. Freshly applied SICONOFLOOR EPOXY GLOSS must be protected against moisture and direct exposure to water for at least 24 hours from the completion of application. The formation of laitance discolouration on the surface indicates contact of fresh material with moisture resulting in divergence in the properties of the final product from the properties declared by SICON. If artificial heating is required, do not use gas, oil, paraffin or other fossil fuel heaters. During the operation of such devices, large amounts of water and carbon dioxide in the form of water vapour are released, which significantly disturb the hardening process of the resin. Use only electric heaters for heating.	
Application methods	Pre-mix component A and then add component B, (mixing ratio 100A:50B), then mix the components until a homogeneous consistency is obtained, but not less than 3 minutes. The mixing ratio of Component A and Component B is shown on the packaging and must not be changed. Changing the proportions will result in a product with properties different from those declared by the Manufacturer. Mixing for too long may cause air entrainment and should therefore be avoided. To mix the resin, use a low speed electric stirrer (300÷400 rpm) or	

	other equipment designed for this.
3-D floors	3-D resin floors are decorative floors, where graphics are applied to a properly prepared substrate, appropriately selected colours are applied, or pebbles, fossil fragments are laid, and everything that allows the pouring of a thick layer of resin (from 0.5-1.0 kg/m ²). The prepared floor is poured with a layer of resin so that a mirror-like surface is created. Then, a spiked roller is used to remove air and level the entire surface. Then it is left to dry. The hardened 3-D resin floor can be additionally covered with a protective coating (Siconofloor PU Matin or Siconofloor PU Satin) in order to extend the life of the floor. The additional coating, in addition to the protective functions, also allows the surface to be given a matt or satin effect. The advantage of an additional protective coating is the fact that it can be removed after use and a new layer can be applied without disturbing the actual surface of the floor.
Storage conditions for kit components	The SICONOFLOOR EPOXY GLOSS resin is a material with a reduced tendency to undergo the crystallization process. It should be stored in a dry place at a temperature of 5~30°C. Component A and B in liquid state are water polluting agents and should not get into the sewage system, ground or water courses. After hardening, the resin is neutral for the environment.
Comments and recommendations	
Health and safety conditions	During all work with resins, use protective clothing, gloves and glasses. Adequate ventilation must be provided when working in confined or closed rooms, and during drying. When working, do not weld and do not come close to open fire sources. Use lighting lamps with appropriate safety measures. Detailed information on health, safety, as well as data on ecological, toxicological properties of the material, etc. are available in the Material Safety Data Sheet for SICONOFLOOR EPOXY GLOSS. Avoid contact with skin. Avoid breathing vapours from heated material. Do not allow individual components to come into contact with acids, strong oxidants, bases. All employees should be thoroughly trained in the handling of epoxy resins and hardeners with regard to the existing hazards. Allergy sufferers must not be commissioned to work with resins. If there is a risk of splashing the resin, use protective gloves and goggles. After each contact of the resin with the skin, wash with water with the addition of mild cleaning agents, do not use benzene, toluene or carbon tetrachloride! For hygiene reasons, you should not eat or drink in the workplace, and also not smoke there.
Concluding remarks	<p>The technical data provided is based on laboratory trials and tests. Practical measurement results may differ from the attached ones, due to circumstances over which Sicon Sp. z o.o. Sp.K. has no control. All information is given in good faith and takes into account the current state of knowledge and experience.</p> <p>The manufacturer informs that the colour of the finished floor may vary. This phenomenon does not indicate a defect of the floor or reduced technical parameters. Possible discolouration may appear because of the way in which work and drying take place. It is recommended to cover specific surfaces with batches of materials from one production batch. The product documentation provides general information that is appropriate under certain conditions.</p> <p>Prior to large-scale use of the product, it is recommended that the purchaser perform an application test under the specific environmental conditions of the construction site. The supplier has no influence on the types of applications, methods of application and conditions of implementation occurring on a construction site, therefore, these instructions cannot result in his responsibility for the final result of the application. Recommendations of Sicon's associates that deviate from the information contained in the technical sheet, are binding only if confirmed in writing.</p> <p>Date of issue: 02/2019</p> <p>All sheets for the Siconofloor EPOXY GLOSS issued so far shall expire on the day of the issuing of this sheet.</p>