

PRODUCT DATA SHEET

SikaForce®-110 CT55

1-component adhesive for panel bonding

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	Polyurethane
Color (CQP001-1)	Yellowish
Cure mechanism	Moisture curing
Density (uncured)	1.38 g/cm ³
Consistency	Liquid
Solid content	100 %
Viscosity (CQP029-4)	Rheometer, PP25, shear rate 10 s ⁻¹ , d=1 mm 13 500 mPa·s ^A
Application temperature	15 – 30 °C
Open time (CQP591-1)	25 minutes ^A
Curing time (CQP591-1)	60 minutes ^A
Gross calorific potential (EN ISO 1716)	20.5 MJ/kg
Shelf life	IBC 3 months smaller packaging 5 months

CQP = Corporate Quality Procedure

^{A)} 23 °C / 50 % r. h.

DESCRIPTION

SikaForce®-110 CT55 is a foaming, moisture curing 1-component polyurethane adhesive for bonding sandwich panels and similar constructions of various materials.

PRODUCT BENEFITS

- Long open time
- Low content of isocyanate
- IMO compliance acc. to DNV-GL

AREAS OF APPLICATION

SikaForce®-110 CT55 is used primarily for bonding sandwich panels with skin materials of pre-treated or primed aluminum, steel, glass fiber reinforced plastic and core materials of plywood, wood, extruded / expanded polystyrene and mineral wool.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed, ensuring adhesion and material compatibility.

CURE MECHANISM

The curing of SikaForce®-110 CT55 takes place by chemical reaction between the adhesive and moisture. Higher temperatures speed up the curing process and lower slow it down.

CHEMICAL RESISTANCE

In case of chemical or thermal exposure, conduct project related testing.

METHOD OF APPLICATION

Surface preparation

Surfaces must be clean, dry and free from grease, oil, dust and contaminants. After the cleaning process, a physical or chemical pre-treatment might be required, depending on surface and type of material. The type of pre-treatment must be determined by tests.

During the curing process, carbon dioxide is released from the adhesive. If none of the substrates are porous, measures need to be taken to allow the carbon dioxide to escape.

Application

Typically a coat weight between 100 and 300 g/m² is applied, depending on the substrates to be bonded. The specific coat weight for a given substrate combination must be determined by tests.

SikaForce®-110 CT55 is a moisture curing adhesive. A water mist of approx. 10 % of the adhesive coat weight, sprayed either on the adhesive or the bond face, is required. SikaForce®-110 CT55 is well suited for automatic applications.

For manual application, apply with trowel, spray water mist on the surface and press parts together before the end of the open time.

For support on selecting and setting up a suitable pump system, contact System Engineering Department of Sika Industry.

Pressing

An adequate bonding pressure is necessary to obtain a voidless contact between the substrates and the adhesive. The specific pressure is, however, dependent on the core material and must be determined by tests. The pressure must always be below the maximum compressive strength of the core. After starting the press process, do not release the pressure until the press time has elapsed.

Removal

Uncured SikaForce®-110 CT55 may be removed from tools and equipment with SikaForce®-096 Cleaner (formerly SikaForce®-7260 Cleaner). Once cured, the material can only be removed mechanically.

Hands and exposed skin have to be washed immediately using hand wipes such as Sika® Cleaner-350H or a suitable industrial hand cleaner and water.

Do not use solvents on skin.

STORAGE CONDITIONS

SikaForce®-110 CT55 has to be kept between 10 °C and 30 °C in a dry place. Do not expose it to direct sunlight or frost. After opening of the packaging, the content has to be protected against humidity.

The lowest allowed temperature during transportation is -20 °C for max. 7 days.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Safety Data Sheets

BASIS OF PRODUCT DATA

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

DISCLAIMER

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

PRODUCT DATA SHEET

SikaForce®-110 CT55
Version 03.01 (03 - 2023), en_DK
012004511100001000

