Technical Data Sheet
Version 06/05

SikaForce® -7110 L14 (formerly 1871)

One component tough adhesive for sandwich panel bonding

Technical Product Data

Chemical base	1-component polyurethane
Colour	Brown
Solids content	100%
Curing mechanism	Moisture curing
Density (uncured) [1] (CQP 006-6) [2]	1.4 g/cm³
Viscosity	10,000 mPa·s (Brookfield RVT 4/10) increasing to max. 20,000 after 3 months
Application temperature	+15°C to +30°C
Open time [1] (CQP 591-1)	6 min. approx.
Curing time [1] (CQP 591-1)	14 min. approx.
Shelf life 1000 litre container Shelf life smaller packaging	3 months 5 months

[1] Testing temperature: +23°C and 50% r.h. [2] CQP: Corporate Quality Procedures

Description

Moisture curing one component polyurethane adhesive. In the process of curing, a light foaming occurs which has a levelling effect on uneven surfaces.
This product is manufactured in accordance with ISO 9001 and ISO 14001 quality assurance systems.

Product Benefits

- Low content of isocyanate
- Short press time
- Approved according to IMO Res. A.653(16)

Areas of Application

Primarily for bonding of sandwich constructions with skin materials of e.g. steel, aluminium or wood and core materials of e.g. mineral wool, polystyrene, polyurethane or wood.

Industry

Cure Mechanism

The curing of SikaForce-7110 L14 takes place by a chemical reaction between the adhesive and moisture. Higher temperatures speed up the curing process; lower temperatures slow down the curing process.

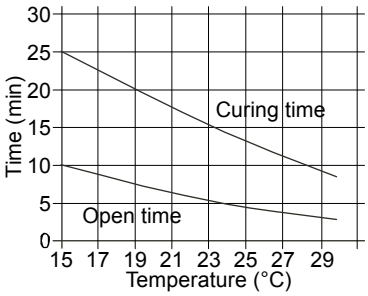

Diagram 1: Open time and curing time for SikaForce-7110 L14

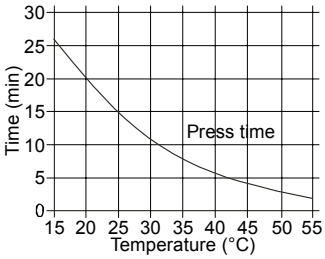

Diagram 2: Press time for SikaForce-7110 L14

Chemical Resistance

In case of expected chemical or thermal exposure, we recommend a project related testing. Please consult our Technical Service for advice.

Method of Application

Surface preparation

It is generally necessary to prepare the items for bonding to ensure optimal adhesion and strength. The pre-treatment may consist of sanding, degreasing, corona treatment, priming, etc.
Especially on metals, it may be an advantage to use a primer.
During the curing process carbon dioxide is released from the adhesive. If none of the substrates are porous, measures should be taken to allow the carbon dioxide to escape.
Type of pre-treatment must be determined by tests. Please consult our Technical Service for advice.

Application

Coat weights between 150 and 350 g/m² are recommended depending on the substrates to be bonded. The specific coat weight for a given substrate combination should be determined by tests.
SikaForce-7110 L14 is a moisture curing adhesive and it is strongly recommended that a water mist of 5-15%, based on adhesive quantity, is sprayed either onto the adhesive, or the material itself, to initiate curing. Automatic application is recommended.
Automatic application equipment can be supplied by Sika Danmark A/S.
Manually: Apply with trowel and press parts together before the end of the open time. Please consult our Technical Service for detailed information.

Pressing

A minimum bonding pressure of 200 g/cm² should be used. The specific pressure is dependent on the core material and should be determined by tests. The pressure must always be below the maximum compressive strength of the core. The bonded items should not be moved during the pressing stage.

Cleaning

Non-cured adhesive on tools and application equipment can be removed with SikaForce-7260 Cleaner.
Cured adhesive can only be removed mechanically.

Storage Conditions

To be kept between +10°C and +30°C in a dry place. Do not expose to direct sunlight or frost.
After opening of the packaging, the contents should be protected against the atmospheric humidity.
The minimum temperature during transportation is 0°C.

Further Information

The following publications are available on request:
- Safety data sheet
- Reactivity curves in large format

Packaging Information

Pail	25 kg
Drum	275 kg
Fluid bag	1300 kg

Important

For information and advice on the safe handling, storage, and disposal of chemical products users should refer to the relevant safety data sheet(s) containing physical, ecological, toxicological and other safety related data for the appropriate type of substance.

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