

SikaFast[®]-5221

Adhesive based on ADP technology

Fast curing two-component adhesive system for structural bonding
(Open time: 9 mins.)

Technical Product Data:

	Component A: SikaFast[®]-5221	Component B: SikaFast[®]-5200
Chemical base	Sika two-component ADP technology	
Colour	White	Black
Colour mixed	Grey	
Density	1,14 g/cm ³ approx.	1,46 g/cm ³ approx.
Density mixed	1,17 g/cm ³ approx.	
Mixing ratio	by volume	10 : 1
	by weight	10 : 1.28
Consistency	Thixotropic paste	
Curing mechanism	Polymerisation	
Open time	at 23°C	9 mins. approx.
(static mixer)	at 70°C	3 mins. approx.
Rate of cure ¹⁾	25 mins. for 70% of final strength approx.	
Shore A (DIN 53505)	90	
Shore D (DIN 53505)	50	
Tensile strength RT (DIN 53504)	10 MPa approx.	
Elongation at break	at RT (DIN 53504)	150% approx.
Elastic modulus	at RT (DIN 53504) 0,5-8%	80 MPa approx.
Adhesion - tensile shear strength (DIN EN 1465) - wipe with Sika [®] ADPrep-5901 - 1,5 mm bond line thickness	Aluminium	8 MPa approx.
	Steel	8 MPa approx.
	Lacquers	6 MPa approx.
	ABS	7 MPa approx.
	PVC (hard)	9 MPa approx.
	Polycarbonate	substrate failure
	PMMA	substrate failure
	PS	substrate failure
	UP, GRP	substrate failure
Application temperature	10°- 40°C	
Service temperature	-40°- 80°C	
Shelf life and storage (stored at temperature below 25°C and not exposed to direct sun light)	9 months	18 months

¹⁾ at 23°C and 50% relative humidity

Industry



Description:

SikaFast[®]-5221 is a fast curing, flexible, two-component adhesive system with a 9 minutes open time. It is based on ADP, Sika's newly developed, user friendly, acid-free polymer technology derived from the acrylic chemistry.

In its uncured state SikaFast[®]-5221 is a pasty, non-sagging, non-flammable material which allows for easy and precise application. It is suitable for structural and semi-structural bonding on a wide range of substrates in the assembly and trim shop.

SikaFast[®]-5221 is manufactured in accordance with the ISO 9001/14001 quality assurance system.

Product benefits:

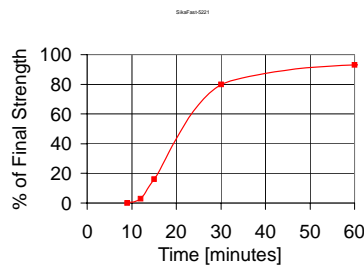
- Strength development within minutes after application
- Adhesion to a wide range of metals and plastics with no or only limited substrate preparation
- High strength
- Gap filling, allowing for manufacturing tolerances (up to 3 mm)
- Flexible
- Vibration damping
- Solvent and acid free
- Easy mixing
- Low odour

Cure mechanism:

SikaFast[®]-5221 is a 10:1 two-component adhesive system curing at room temperature:

The component A, SikaFast[®]-5221, contains the reactive monomer, and component B, SikaFast[®]-5200, acts as initiator. On mixing by the means of a static mixer, the polymerisation reaction is started.

SikaFast[®]-5221 offers a relatively long open time followed by fast curing which results in an optimal relation between application time and strength development to reach handling strength, see diagram (the curing time is slightly varying depending on ambient temperature):



Area of application:

The ADP technology offers a new generation of fast curing, flexible adhesives designed to substitute welding, riveting, clinching and other mechanical fastening techniques. SikaFast[®]-5221 is suitable for high strength fastening of concealed joints on different types of substrates including top coats, plastics, etc.

Be aware that the mechanical properties are temperature depending (values on request).

For support contact Sika Technical Service.

Chemical resistance:

For advice contact Sika Technical Service.

Method of application:

Substrate preparation. Surfaces must be clean, dry, free from all traces of dust and grease. Remove all loose particles or residues. Contaminated areas must be thoroughly cleaned before proceeding. In combination with SikaFast[®]-5221 Sika strongly recommends the use of Sika[®] ADPrep-5901, the general surface preparation agent for Sika[®] ADP adhesive system.

Application. With a 2-component cartridge or pump at mixing ratio 10:1 through a static mixer. The open time can be slightly varied (method on request).

Excess material can best be removed before curing with a dry wipe.

Important. If applied in large masses heat is generated by the exothermic reaction.

For additional information and support in evaluation of the appropriate application equipment please contact our Sika Technical Service.

Further information:

Copies of the following publications are available on request:

- Safety Data Sheet

Packaging information:

SikaFast [®] -5221 (comp. A):	20 l pail
SikaFast [®] -5200 (comp. B):	18 l pail
Dual cartridge 2-in-1 (comp. A+B combined)	250 ml

Important:

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the current Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Note:

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.



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