

# PRODUCT DATA SHEET

## Sika AnchorFix<sup>®</sup>-1 N

### FAST CURING POLYESTER ANCHORING ADHESIVE

#### PRODUCT DESCRIPTION

##### USES

Sika AnchorFix<sup>®</sup>-1 N may only be used by experienced professionals.

As a fast curing anchoring adhesive for all grades of:

- Rebars / reinforcing steel
- Threaded rods
- Bolts and special fastening systems
- In the following substrates:
  - Hollow and solid masonry
  - Hard natural stone\*
  - Solid rock\*

\* These substrates may vary greatly, in particular with regard to strength, composition and porosity. Therefore, for each application the suitability of Sika AnchorFix<sup>®</sup>-1 N Adhesive must be tested by first applying Sika AnchorFix<sup>®</sup>-1 N Adhesive only to a sample area. Check in particular bond strength, surface staining and discoloration.

#### CHARACTERISTICS / ADVANTAGES

- Fast curing
- Standard guns can be used
- Can be used at low temperatures
- ETA to ETAG 029 for anchoring in masonry
- Non-sag, even overhead
- Styrene-free
- Low odour
- Low wastage

#### ENVIRONMENTAL INFORMATION

Sika AnchorFix<sup>®</sup>-1 N conforms on the LEED v2009 IEQc 4.1 Low Emitting Materials - Adhesives and Sealants, product category "Architectural Applications, Multipurpose construction adhesive"

#### APPROVALS / STANDARDS

Injection system for use in masonry according to ETAG 029, ETA-17/0327, Declaration of Performance 86553674, certified by notified product certification body 1020, certificate of constancy of performance 1343-CPR-M 632-1, and provided with the CE marking

## PRODUCT INFORMATION

<b>Packaging</b>	300 ml standard cartridge	12 cartridges per box pallet: 84 boxes
<b>Colour</b>	Component A:	white
	Component B:	black
	Component A+B mixed:	light grey
<b>Shelf Life</b>	9 months from date of production All Sika AnchorFix®-1 N cartridges have the expiry date printed on the label.	
<b>Storage Conditions</b>	Stored properly in original, unopened, sealed and undamaged packaging in dry conditions at temperatures between +5 °C and +25 °C. Protect from direct sunlight.	
<b>Density</b>	~1.74 kg/l (component A+B mixed)	

## TECHNICAL INFORMATION

<b>Compressive Strength</b>	~75 N/mm <sup>2</sup> (7 days, +20 °C)	(EN 196)
<b>Flexural Strength</b>	~30 N/mm <sup>2</sup> (7 days, +20 °C)	(EN 196)
<b>Flexural E-Modulus</b>	~4000 N/mm <sup>2</sup>	(EN 196)
<b>Service Temperature</b>	Long term	-40 °C min. / +50 °C max. (ETAG 001, Part 5)
	Short term (1–2 hours)	+80 °C

## APPLICATION INFORMATION

<b>Mixing Ratio</b>	Component A : component B = 10 : 1 by volume		
<b>Layer Thickness</b>	3 mm max.		
<b>Sag Flow</b>	Non-sag, even overhead		
<b>Product Temperature</b>	Sika AnchorFix®-1 N must be at a temperature of between +5 °C and +35 °C for application.		
<b>Ambient Air Temperature</b>	-5 °C min. / +40 °C max.		
<b>Dew Point</b>	Beware of condensation. Substrate temperature during application must be at least 3 °C above dew point.		
<b>Substrate Temperature</b>	-5 °C min. / +40 °C max.		
<b>Curing Time</b>	<b>Temperature</b>	<b>Open time - T<sub>gel</sub></b>	<b>Curing time - T<sub>cur</sub></b>
	+35 °C – +39 °C	2 minutes	20 minutes
	+30 °C – +34 °C	4 minutes	25 minutes
	+20 °C – +29 °C	6 minutes	45 minutes
	+15 °C – +19 °C	15 minutes	80 minutes
	+10 °C – +14 °C	20 minutes	100 minutes
	+5 °C – +9 °C	25 minutes	2 hours
	0 °C – +4 °C <sup>1</sup>	45 minutes	3 hours
	-5 °C – -1 °C <sup>1</sup>	90 minutes	6 hours

<sup>1</sup> Minimum cartridge temperature: +5 °C

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY

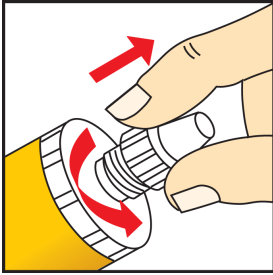
- Mortar and concrete must be at the required strength. No need to be 28 days old.

- Substrate strength (concrete, masonry, natural stone) must be verified.
- Pull-out tests must be carried out if the substrate strength is unknown.
- The anchor hole must always be clean, dry, free from oil and grease etc.

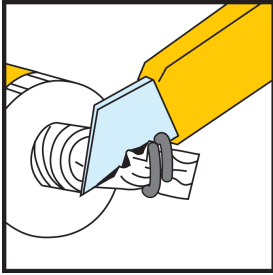
- Loose particles must be removed from the holes.
- Threaded rods and rebars have to be cleaned thoroughly from any oil, grease or any other substances and particles such as dirt etc.

## MIXING

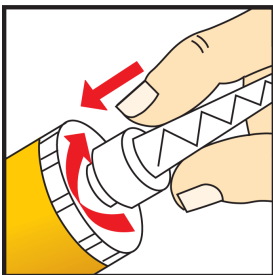
### Getting the cartridge ready: 165 / 300 ml



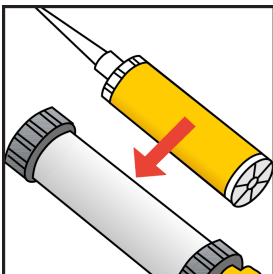
1. Unscrew the cap



2. Cut the film

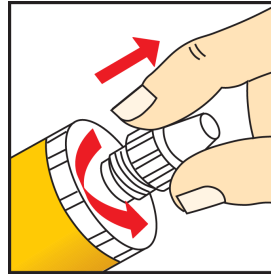


3. Screw on the static mixer

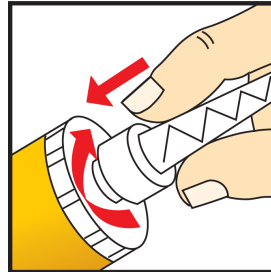


4. Place the cartridge into the gun and start application

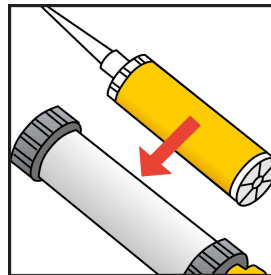
### Getting the cartridge ready: 420 ml



1. Unscrew & remove the cap



2. screw on the static mixer

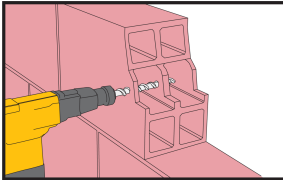


3. Place the cartridge into the gun and start application

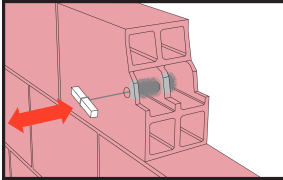
When the work is interrupted the static mixer can remain on the cartridge after the gun pressure has been relieved. If the resin has hardened in the nozzle when work is resumed, a new nozzle must be attached.

## APPLICATION METHOD / TOOLS

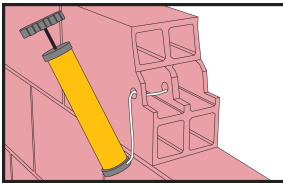
### Anchors in hollow blocks



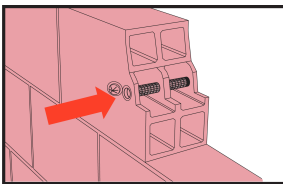
Drilling of hole with an electric drill to the diameter and depth required. Drill hole diameter must be in accordance with anchor-and perforated sleeve size.  
Note: with hollow material do not use rotary hammer drills.



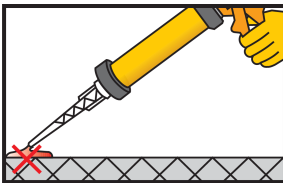
The drill hole must be thoroughly cleaned with a round brush (brush at least 1x). The diameter of the brush must be larger than the diameter of the drill hole.



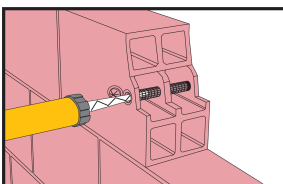
The drill hole must be cleaned after each cleaning step with a blow pump or by compressed air, starting from the bottom of the hole (pump at least 1x).  
Important: use oil-free compressors.



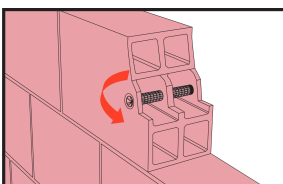
Insert perforated sleeve completely into the drill hole.



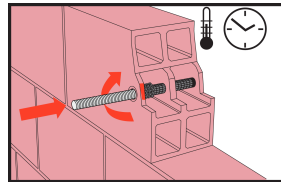
Pump approx. twice until both parts come out uniformly. Do not use this material. Release the gun pressure and clean the cartridge opening with a cloth.



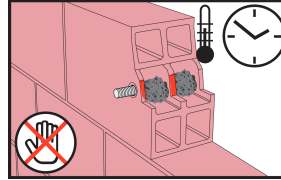
Inject the adhesive into the perforated sleeve, starting from the bottom, while slowly drawing back the static mixer. In any case avoid entrapping air.



Close the cap from the perforated sleeve to avoid some escape of the resin during entering the steel rod.



Insert the anchor with a rotary motion into the filled perforated sleeve. Use the adequate steel rod size.  
Important: the anchor must be placed within the open time.



During the resin hardening time the anchor must not be moved or loaded. Wash tools immediately with Sika® Colma Cleaner. Wash hands and skin thoroughly with warm soap water.

### CLEANING OF TOOLS

Clean tools and application equipment with Sika® Thinner C immediately after use. Hardened / cured material can only be mechanically removed.

### VALUE BASE

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

### LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

### ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## LEGAL NOTES

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 accordance with Sika's recommendations. 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 user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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