Product Data Sheet Edition 1.30.2012 Identification no. C370 Sikadur AnchorFix-1

# Sikadur® AnchorFix-1

# Modified-acrylic anchoring adhesive

Sikadur AnchorFix-1 is a two-component, solvent- and styrene-free, modified-acrylic anchoring adhesive.
As a fast-curing anchoring adhesive for all grades of rebars, threaded rods, bolts and special fastening systems. Install in concrete and masonry base materials.
<ul> <li>■ Low sensitivity to mixing errors.</li> <li>■ Fast-curing.</li> <li>■ Styrene-free, solvent-free</li> <li>■ Low odor.</li> <li>■ Low waste.</li> <li>■ Can be dispensed/mixed with a standard, good quality caulking gun or sausage gun.</li> </ul>
10 fl.oz. (300 ml) or 20 fl.oz. (550 ml) two-component collapsible "cartridge in cartridge" system. Ready-to-use with a standard, good quality caulking gun (10 fl.oz.) or sausage gun (20 fl.oz.).

### **Gel and Curing Times**

Application Temperature	Gel Time	Cure Time
86°F (30°C)	3 minutes	25 minutes
68°F (20°C)	7 minutes	50 minutes
50°F (10°C)	22 minutes	150 minutes
41°F (5°C)	50 minutes	200 minutes
14°F (-10°C)	80 minutes	24 hours

#### Limitations

■ THE NTSB HAS STATED THAT THIS PRODUCT IS APPROVED FOR SHORT TERM LOADS ONLY AND SHOULD NOT BE USED IN SUSTAINED TENSILE LOAD ADHESIVE ANCHORING APPLICATIONS WHERE ADHESIVE FAILURE COULD RESULT IN A PUBLIC SAFETY RISK. CONSULT A DESIGN PROFESSIONAL PRIOR TO USE.

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**Shelf Life** Use within 18 months of manufacturing date.

Storage Conditions Store dry in original unopened packaging in cool conditions

at 40°-80°F (4-27°C) and out of direct sunlight.

**Color** Components 'A'+'B' mixed: uniform gray

Mixing Ratio Components 'A':Component 'B' = 10:1 by volume

Consistency Comp. 'A'+'B' mixed: non-sag, creamy paste

Application Temperatures Substrate and ambient: 14°-86°F (-10°-30°C)

**Density (Mixed)** 2.75 lbs./gal. (0.33 kg/l)



**Component A: IRRITANT.** Contains epoxy resin, 1-ethenyl-4-methyl benzene, and silica quartz (sand). Eye irritant. May cause skin/respiratory irritation. Harmful if swallowed.

**Component B: IRRITANT, SENSITIZER.** Contains benzoyl peroxide, and glycerine. Eye irritant. May cause skin/respiratory irritation. Prolonged and/or repeated skin contact may cause an allergic reaction/sensitization. Harmful if swallowed.

Cured material, if sanded, may result in exposure to a chemical known to the State of California to cause cancer.

# Components A & B First Aid

**Eyes:** Flush eyes with water for at least 15 minutes **Skin:** Immediately flush skin with soap and water for at least 15 minutes. **Ingestion:** Do not induce vomiting. Contact a physician. **Inhalation:** Remove to fresh air. Contact a physician if symptoms persist. **Contact a physician immediately with all cases if symptoms persist.** 

## Components A & B

Handling and Storage Avoid contact with skin and eyes. Use chemical resistant gloves/goggles/clothing. Use with adequate general and local exhaust ventilation. In the absence of adequate ventilation, use a properly fitted NIOSH approved ventilator. Wash hands thoroughly after handling product. Remove contaminated clothing and launder before reuse. Store in a cool, dry, well-ventilated area.

# Components A & B Clean Up

In case of spill, wear chemical resistant gloves/goggles/clothing. Ventilate area. In absence of adequate ventilation, use a properly fitted NIOSH respirator. Contain spill and collect with absorbent material and transfer to a sealed container. Dispose of in accordance with applicable local, state and federal regulations.

Anchor Diameter (in.)	Drill Bit Diameter (in.)	Embedment Depth (in.)	Allowable Tensile Bond Strength Min. 2,000 psi (13.8 MPa) Concrete (lbs.)	Allowable Tensile Bond Strength Min. 4,000 psi (27.5 MPa) Concrete (lbs.)	Allowable Shear Load ≥ 2,000 psi (13.8 MPa) Concrete (lbs.)
		2-1/4	620	870	335
3/8	7/16	3-1/2	1,285	1,840	1,125
		4-1/2	1,400	1,995	1,125
		3	925	1,300	600
1/2	9/16	4-1/4	1,635	2,340	2,000
		6	1,855	2,600	2,000
		3-3/4	1,545	1,985	940
5/8	3/4	5	2,310	3,300	3,130
	L	7-1/2	3,085	3,970	3,130
		4-1/2	2,450	3,435	1,350
3/4	7/8	6-3/4	3,395	4,850	4,505
		9	4,610	6,425	4,505
		6	3,640	5,100	2,400
1	1-1/8	8-1/4	4,210	6,020	8,010
	1	12	5,825	8,740	8,010

#### **Load Capacities - Threaded Rod**

- Allowable loads are based on a minimum safety factor of 5.33. Higher factors of safety may be warranted depending on actual application and job site conditions. Consult a design professional prior to use.
- 2) Minimum concrete base material thickness must be 1.5 times the anchor embedment depth.
- 3) Allowable load of adhesive anchor must be the lesser of bond or steel strength.

\*\*For information on the effects of Anchor Spacing and Edge Distance on adhesive anchor performance, please contact Sika's Technical Service Department.

Rebar Size (Diameter)	Drill Bit Diameter (in.)	Embedment Depth (in.)	Allowable Tensile Bond Strength Min. 2,000 psi (13.8 MPa) Concrete (lbs.)	Allowable Tensile Bond Strength Min. 4,000 psi (27.5 MPa) Concrete (lbs.)	Allowable Shear Load ≥ 2,000 psi. (13.8 MPa) Concrete (lbs.)
No. 3 (3/8")	1/2	3-3/8	750	1,070	1,190
No. 4 (1/2")	5/8	4-1/2	1,345	1,925	1,970
No. 5 (5/8")	3/4	5-5/8	1,945	2,780	2,940
No. 6 (3/4")	7/8	6-3/4	2,550	3,640	4,110
No. 7 (7/8")	1	7-7/8	3,145	4,495	5,450
No. 8 (1")	1-1/8	9	3,745	5,355	7,030

### Load Capacities -Reinforcing Bar 1) Allowable loads

- 1) Allowable loads are based on a minimum safety factor of 5.33. Higher factors of safety may be warranted depending on actual application and job site conditions. Consult a design professional prior to use.
- 2) Minimum concrete base material thickness must be 1.5 times the anchor embedment depth.
- 3) Allowable load of adhesive anchor must be the lesser of bond or steel strength.
- \*\*For information on the effects of Anchor Spacing and Edge Distance on adhesive anchor performance, please contact Sika's Technical Service Department.



#### Solid Base Material



Drill the hole to the correct diameter and depth using a rotary



Screw on the static mixer

This should be

done slowly

with a slight

twisting motion. Excess



-1000 Blow the hole clean with compressed air, brush clean with a nylon brush and blow clean again. Hole may be dry or damp but must be free from standing water.



Place the cartridge into the applicator gun. Dispense the first

truded adhesive to waste until a uniform color is achieved.





has elapsed then attach the fixture and tighten the nut.



Unscrew and remove the cap



Insert the mixer nozzle to the far end of the hole

and half fill hole (depending upon application). Withdraw nozzle as you fill the hole. For deep holes extension tubing can be used



Cut the film.



Prior to use, remove surface contaminants such as oil or grease from anchor to avoid inadequate bond Immediately insert the anchor hardware.

## **Hollow Base Material**

chemical resistant gloves

resin should be removed from the

mouth of the hole before it sets. Use



Drill the hole to the correct diameter and depth. This can be done with either a

hammer drill or rotary-only machine depending upon the substrate.



Blow the hole clean with compressed air, brush clean with a nylon brush and blow clean again. Hole may be dry or damp but must be free from standing water.



perforated screen.



Unscrew and remove the the cap







Attach the static mixing nozzle



gun. Dispense the first part of the extruded

Place the

cartridge into

the applicator

adhesive to waste until a uniform color is achieved



Insert mixer nozzle to the far end of the perforated sleeve and completely fill the sleeve with resin. Withdraw the mixer nozzle as the sleeve fills.



Prior to use, remove surface contaminants such as oil or grease from anchor to avoid inadequate bond, Immediately insert the anchoring hardware. This should be done slowly with a slight twisting motion. Leave the anchor undisturbed until the cure time has elapsed, then attach the fixture and tighten

### KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY

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