



FAST-SETTING ANCHORING EPOXY

Fast-setting, 100% solids epoxy repair for general construction applications

1. PRODUCT NAME

Akona® Fast-Setting Anchoring Epoxy

2. MANUFACTURER

TCC Materials®
2025 Centre Pointe Blvd.
Mendota Heights, MN 55120 USA
Phone: 1.651.688.9116
Web: tccmaterials.com

3. PRODUCT DESCRIPTION

Akona Fast-Setting Anchoring Epoxy is a two-component, non-sag, 100% solids, high-performance, moisture tolerant epoxy adhesive designed for anchoring bolts and rebar steel into concrete and for bonding or repairing a variety of household and common building materials including concrete, porous tile, and stone. Because it is resistant to moisture during and after curing, it is ideal for stopping air and water leaks. Gray in color. Maximum width 1/8 in. (3 mm) annular, depth is limited by diameter of anchor.

Features and Benefits

- High-strength
- Resists chemicals and solvents
- Moisture tolerant
- Fits standard caulking gun
- Non-shrink
- Fast-setting:
 - ⇒ Initial set time of in as little as 12-14 min.
 - ⇒ Initial cure time of 2 hr.
 - ⇒ Final cure of 12-16 hr.
- Non-sag
- Excellent adhesion

When/Where to Use

- Most household and building materials including concrete, tile, stone
- For horizontal and vertical repairs
- Fills defects in concrete floors, walls, driveways, stairs, and patios
- Bonds loose or cracked tiles
- Secures railings or posts
- Stops air and water leaks
- For setting anchor bolts, dowels, and rebar in concrete and masonry

4. TECHNICAL DATA

Available Size

Typical Values • Akona Fast-Setting Anchoring Epoxy	
Mix ratio	1 part A; 1 part B by volume
Mixed color	Gray
Solids (%)	100
Gel Time	2 oz. (60 g) mass: 14 minutes at 77°F (25°C)
Gel Time	1 oz. (30 g) mass: 30 minutes at 77°F (25°C)
Tensile strength (ASTM D412)	4,500 psi (31 MPa)
Elongation (ASTM D412)	6%

Water absorption (ASTM D-570)	0.37% at 7 days
Compressive strength (ASTM D695)	11,000 psi (75.8 MPa)

- 8.6 oz. (250 mL) tube (BOM #120438)

Coverage

Each 8.6 oz. tube yields approximately 30 lin. ft. (9.1 m) at 1/8 in. x 1/8 in. (3x3 mm) line

Rebar Size	Hole Diameter	Hole Depth	Anchors per 8.45 fl. oz. Tube
3/8"	7/16"	3 5/8"	43
3/8"	7/16"	5 5/8"	27
1/2"	9/16"	4 1/2"	23
1/2"	9/16"	7 1/2"	13
5/8"	3/4"	5 5/8"	9
5/8"	3/4"	9 5/8"	5
3/4"	7/8"	6 3/4"	6
3/4"	7/8"	11 1/4"	3
1"	1-1/8"	9"	3
1 1/4"	1 3/8"	11 1/4"	1

5. INSTALLATION

Preparation

Read all directions before starting work. Proper surface preparation is crucial to achieving a successful application.

1. For better adhesion concrete surfaces should be dry and cured a minimum of 21-28 days from date of placement depending upon curing and drying conditions. Surface and ambient temperature must be 40°F (5°C) or above.
2. Prepare all anchor holes prior to placement of Fast-Setting Anchoring Epoxy. Drill the hole to the correct diameter and depth to suit the anchor, using a rotary percussion drill and carbide-tipped bit. Hole diameter is typically 1/8 in. (3 mm) greater than the anchor diameter and hole depth is typically nine times anchor diameter.
3. Surface to be bonded must be clean and sound. Remove dust, dirt, grease, curing compounds laitance, and other foreign matter by sandblasting, hydro blasting, or mechanical abrasion. For drilled holes and cracks, clean with a nylon bristle brush. Remove all water and dust with clean compressed air prior to installation.

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Mixing

- Before using, condition material to 65°F-85°F (18°-29°C).
- Unscrew and remove both protective cap and plug from the cartridge. Insert the flow restrictor, attach the static nozzle mixer and tighten nut. Load cartridge into standard caulking gun.
- Dispense a bead of epoxy until the color is uniform. The first

two or three dispenses are used to remove air and ensure the correct mixing ratio, this material must be discarded. The cartridge is now ready to use. Disperse with deliberate slow and even pressure to allow proper blending of the resin and hardener in the static mixing nozzle.

- When the work is interrupted, the static mixer can remain on the cartridge after the gun pressure has been relieved. Work quickly, once material hardens in the nozzle, a new nozzle must be used. Cartridge should remain upright to reduce the risk of material draining from the nozzle.

Application

Bonding and repairs:

- Apply neatly and work into substrate. The glue line should not exceed 1/8 in. (0.3cm).

Anchoring:

- Dispense the epoxy into the anchoring hole filling from the bottom up. The annular space around the bolt, dowel or anchor should not exceed 1/8 in. (0.3 cm). Insert the bolt, dowel, rebar, or rod to be anchored, turning it slowly, making sure all the rods are thoroughly coated. Adjust to the correct position within the stated working time. After insertion, the hole should be completely full of epoxy. Any excess resin should be expelled from the hole evenly around the anchor showing that the hole is full. Excess resin should be removed before it hardens.

Curing

The rate of cure is dependent on the amount of material used and the temperature at which it is applied. Gel time is 30 minutes for 1 oz. (30 g) and 14 minutes for 2 oz. (60 g), at 77°F (25°C). At temperatures below 77°F (25°C) this product will take proportionately longer time to cure. At temperatures above 77°F (25°C) it will take a proportionately shorter time to cure. Initial cure in 2 hours. Reaches final cure in 12-16 hours. Allow to cure until the epoxy is hard to the touch.

Clean Up

Fast-Setting Anchoring Epoxy should be wiped clean before it cures, once cured, it can only be mechanically removed. Avoid getting epoxy on skin.

Limitations

- For professional use only.
- Follow all industry standard safety procedures when handling, such as chemical resistant gloves, eye and skin protection.
- Per NTSB Safety Recommendations, the use of adhesive anchors is prohibited in sustained overhead load anchoring applications.
- Always test a small amount to insure that the product is mixed thoroughly and that the material will harden properly before proceeding.
- Do not thin with solvents.
- Surface and ambient temperature must be 40°F (5°C) or above.
- For applications with constant high temperature (above 120°F/49°C), contact TCC Materials.
- Do not expose stored product to cold or freezing temperature (below 35°F/ 2°C) for any length of time
- High temperature will accelerate the setting time and cool temperature will slow the setting time. As a general rule, the gel time of the epoxy will be cut in half for each 10°-15° increase in temperature above 75°F and the gel time will double for each 10°-15° drop below 75°F (24°C).
- Minimum age of concrete must be 21-28 days, depending on curing and drying conditions.
- Not for sustained long-term loads, or over-head anchoring.

Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: tccmaterials.com

Cautions

Read complete cautionary information printed on product container prior to use.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Akona brand product(s) under normal environmental and working conditions. Because each project is different, TCC Materials cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

6. AVAILABILITY

To locate Akona products in your area, please contact:

Phone: 1.651.688.9116

Email: info@tccmaterials.com

7. WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.



Shelf Life	Best when used within 18 months in original, unopened container.
Storage Conditions	Store dry, cool (35°F-<95°F/2°C-<35°C), out of direct sunlight.
Color	Gray

KEEP PRODUCT IN CONTAINER FROM FREEZING

WARNING: INJURIOUS TO EYES

KEEP OUT OF REACH OF CHILDREN



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