

ULTRA-FAST ANCHORING ADHESIVE

Two-Component Structural Acrylate



PRODUCT DATASHEET

DESCRIPTION: Rapid Set® ULTRA-FAST ANCHORING ADHESIVE is a two-component, high strength acrylate structural adhesive designed to develop a strong, durable bond to concrete and masonry materials. The high-performance mechanical bond strength, pull-out strength and heat deflection temperature make it ideal for use as a rigid structural, chemical anchor adhesive.

USES: Use ULTRA-FAST ANCHORING ADHESIVE on properly prepared concrete and masonry substrates. It is ideal for anchoring bolts, dowels, rebar, and wall tiles to concrete, concrete blocks, solid and hollow masonry, natural stone, solid rock and other masonry substrates. Do not apply into porous or reconstituted stone. This bonded anchor is not intended for use as a cosmetic or decorative product. The resin may cause staining in certain materials.

SURFACE PREPARATION: Ensure the substrate is clean, sound, dry and free of bond inhibitors, such as grease, oil, mold, coatings, sealers, or moisture. Do not install anchor in cracked, delaminated or weak substrates. Drill to the required diameter and depth with a roto-hammer or traditional drill and bit. Use a wire brush and compressed air to thoroughly remove all dust and debris from the application substrate.

APPLICATION: The minimum application temperature is 40°F (4°C) and rising. The maximum application temperature is 90°F (32°C). For best results, place adhesive when the ambient temperature is between 68°F and 77°F (20°C and 25°C). Ensure surface, personnel and equipment are ready before application. Remove screw top, pull up on the bag and cut carefully under the aluminum clip to open bag. Screw the provided nozzle onto the mouth of the cartridge. Insert the cartridge into a quality extrusion gun with a minimum of 18:1 thrust ratio. Before placing the nozzle into the hole, extrude material until an even gray color, without streaks, flows out of the nozzle. Insert the nozzle to the bottom of the hole. Extrude resin and slowly withdraw the nozzle to approximately 3/4 of the hole depth, keeping the tip immersed in the resin. Ensure no air voids are created as the nozzle is withdrawn. Insert the anchor, which must be free of oil or other release agents, to the bottom of the hole using a twisting motion. Twist the anchor at least 180 degrees while installing. To avoid air voids, do not withdraw and re-insert the anchor. Excess resin must be flush with the top of the hole. Clean any excess resin from around the hole. Leave the anchor to cure. Do not disturb the anchor until the material is set. Recommended annular space is 1/8" (3.1 mm), not to exceed 1/4" (64 mm).

CURING: Work time is 5 minutes, service ready in 50 minutes at 68°F to 77°F (20°C to 25°C).

Cartridge Temperature	Work Time (minutes)	Substrate Temperature	Service Time (minutes)
40°F (5°C)	18 min	40°F (5°C)	24 hours
50°F (10°C)	10 min	50°F (10°C)	145 min
60°F (16°C)	6 min	60°F (16°C)	85 min
70°F (21°C)	5 min	70°F (21°C)	50 min
80°F (27°C)	4 min	80°F (27°C)	40 min
90°F (32°C)	2 min	90°F (32°C)	35 min

OVERVIEW

Highlights:

Ultra-Fast Curing: Working time 5 minutes and ready for structural load in 50 minutes at 72°F (22°C)

Excellent adhesion to concrete and masonry

Interior/Exterior: Durable in tough environments

Ideal in colder temperatures

Rigid Structural Anchor: Variable range of anchoring depths

No expansion forces, avoiding breakout of concrete

High load capacities

Conforms to:

ASTM C-881 Type IV, Grade 3, Class A, B, C Modified Acrylate

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03 05 07 Adhesives for Concrete

09 05 00 Adhesives – Common Work Results, Finishes

99 00 00 Construction & Industrial Products

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COLD WEATHER: Installation in low temperatures will extend cure times of the Rapid Set® ULTRA-FAST ANCHORING ADHESIVE. To ease flow and placement in cold conditions, warm the adhesive above 70°F (21°C) for 24 hours prior to installation. Remove dew, frost or ice from the substrate with acetone on a clean cloth and place adhesive immediately.

WARM WEATHER: Installation in warmer temperatures at 80°F (27°C) and above will not adversely affect adhesive performance. Warmer temperatures will decrease viscosity, working and cure time.

CLEAN-UP: Clean up with acetone and disposable rags before it hardens on placement tools and surfaces. Dispose of waste material in compliance with local regulations.

PACKAGING: ULTRA-FAST ANCHORING ADHESIVE is available in a 10.1 fl. oz. (299 mL) cartridge.

SHELF LIFE: When stored correctly, the shelf life is 18 months from the date of manufacture.

STORAGE: Store upright in original, unopened container, in a cool, dry, area. Protect unopened container from water, heat and direct sunlight. Store at 40°F to 85°F (4°C to 29°C). Elevated temperatures will reduce shelf life.

LIMITATIONS: Not for use in cracked, delaminated or weak substrates. This product is approved for use when the maximum long term temperature does not exceed 122°F (50°C) and the maximum short term temperature does not exceed 176°F (80°C). Long-term temperatures are roughly consistent over significant time periods. Short-term temperatures occur over brief intervals. Consult a design professional prior to use. The design professional on the job is ultimately responsible for the interpretation of the data provided above and potential safety hazards.

USER RESPONSIBILITY: Before using, read current technical data sheets, bulletins, product labels and safety data sheets. It is the user's responsibility to review the instructions and warnings for any CTS products prior to use. Wear chemical resistant gloves and protect eyes and skin during use. Do not attempt to force adhesive out of a hardened mixing nozzle. Use a new mixer nozzle to avoid rupturing the container. If a leak should develop, discontinue use immediately and use a new cartridge. While all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the company. It is the responsibility of the customer to confirm that the product is fit for the purpose for which it is intended to be used.

WARNING: DO NOT BREATHE VAPORS. AVOID CONTACT WITH SKIN AND EYE. Use product in well ventilated areas. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators are recommended in confined areas, or when conditions (such as heated polymer, sanding) may cause high vapor concentrations. Do not weld on, burn or torch any acrylate material. Hazardous vapor is released when an acrylate is burned. For additional information refer to the precautionary statement on the Safety Data Sheet.

Please refer to the SDS and www.CTScement.com for additional safety information regarding this material.

LIMITED WARRANTY: CTS Cement Manufacturing Corp. (CTS) warrants its materials to be of good quality, and at its option, within 18 months from date of manufacture, will replace material proven defective or refund purchase price thereof, and such replacement or refund shall be the limit of CTS's responsibility. Except for the foregoing, all warranties, expressed or implied, including merchantability and fitness for a particular purpose, are excluded. CTS shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials.

⚠ WARNING

CANCER and REPRODUCTIVE HARM - www.P65Warnings.ca.gov

TYPICAL PHYSICAL DATA

Color (when mixed)	Gray
Gel Time ASTM C881	6 min
Density ASTM D1875	106 lb/ft ³ (1.7 g/cm ³)
Compressive Strength ASTM D695	8700 psi (60 MPa) (24 hours)
	10,100 psi (69.6 MPa) (7 days)
Tensile Strength ASTM D638	1600 psi (11.0 MPa) (24 hours)
	1700 psi (11.7 MPa) (7 days)
Tensile Modulus ASTM D638	490,000 psi (3,378 MPa) (24 hours)
	650,000 psi (4,481 MPa) (7 days)
Flexural Strength ASTM D790	4000 psi (27.6 MPa) (7 days)
Heat Deflection Temperature (HDT) ASTM D648	176° F (80°C) (7 days)
Volatile Organic Compounds (VOC) ASTM D2369	36 g/L

Note: ASTM Standards are current unless otherwise stated.
Data obtained at 68°F (20°C)

VOC Compliance

Meets U.S EPA 40 CFR 59 Subpart C & D; CARB: California Air Resource Board; LADCO: Lake Michigan Air Directors Consortium (Illinois, Indiana, Michigan, Wisconsin); MRPO: Midwest Regional Planning Organization (Illinois, Indiana, Michigan, Ohio, Wisconsin); SCAQMD: South Coast Air Quality Management District (Los Angeles, Orange, Riverside, San Bernardino Counties); and CEPA/EC: Canada Environmental Protection Agency/Environment.



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