



CIA-GEL 7000

Technical Data Sheet

Description

100% solids, two component, moisture insensitive epoxy. Designed to be used where consistently high strength adhesive is required, backed by extensive research and testing.

General Uses

CIA-GEL 7000 is ideally suited for a wide range of applications requiring strength and durability including:

- Anchoring threaded rod or rebar into concrete.
- Waterproof sealant
- Anchoring vibrating equipment.
- Structural crack injection.
- Support brackets for rail projects.
- Expansion joint anchors.
- High-strength “non-pick” caulking for security projects
- Tilt up wall braces.
- Water and wastewater treatment projects.
- Bearing plates.
- Bonding between existing and new concrete.
- Anchoring for DOT projects.
- Surface patching and spall repair.

Features

- Excellent chemical resistance.
- Low odor, low toxicity, non-shrink.
- ICC-ES ESR-1702 (AC58). Compliant to 2012 IBC
- City of Los Angeles approved.
- Easy to use; no setting tools required.
- High strength, aggressive bonding formulation.
- Reliable: nozzle mixes two components completely.
- California Department of Transportation (Caltrans) and many other state DOT approved.
- Easy troweling when used as a spall repair.
- Moisture insensitive.
- Meets ASTM C881.
- Fast curing.
- 100% solids.
- Damp or wet applications.

Material Storage

Store material on pallets or shelves in a warehouse in temperatures above 40°F.

Shelf Life

1 year in properly stored, unopened containers.

Viscosity

A Component (Resin)	16,000 cps.
B Component (Hardener)	23,500 cps.
Mixed	152,000 cps. (NON-SAG PASTE)

Color

A Component (Resin)	Black liquid
B Component (Hardener)	White liquid
Mixed Concrete	gray gel

Cured Properties

Compressive Strength (ASTM D 695)	18,500 psi	7 days cure at room temperature.
Tensile Strength (ASTM D 638)	5,500 psi	7 days cure at room temperature.
Tensile Elongation (ASTM D 229)	0.57	
Heat Deflection Temperature (ASTM D 648)	144°F	7 days cure at room temperature.

Bond Strength

Slant/Shear Strength (ASTM C-882) 6,000 psi, 7 days cure (epoxy) at room temperature.
All breaks in concrete, no failure on bond line.

Cleaning

Prior to curing, CIA-Gel may be removed from tools and equipment using xylene or lacquer thinners.



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Limitations

Application at ambient temperatures below 20°F is not recommended. Exposure to temperatures exceeding 110°F for prolonged periods is not recommended.

Shelf Life

1 year minimum. CIA-Gel is not sensitive to heat or UV light. Prevent from freezing.

Precautions

Read warning on cartridge and refer to Safety Data Sheet prior to use.

Warranty

MiTek® Inc. warrants to the Buyer that this product is in good quality and conforms to the manufacturer's specifications in force on the date of manufacture and when used in accordance with the Installation Instructions and when stored as directed in the technical literature. Manufacturer cannot warrant or guarantee any particular method of use, performance or application under any particular condition and Buyer is responsible for determining the suitability of intended purpose and assumes all risks therein. MiTek shall not be liable for any injury, loss, cost of labor or consequential damages either directly, indirectly or incidentally, arising out of the use or misuse of any product sold by MiTek or another distributor. If the product is proven to be in nonconformance, the Buyers sole remedy shall be a refund of the purchase price or replacement of product.

Product Specifications

CIA-Gel Epoxy		
Parameter	Part A	Part B
Color	Black	White
Product	Epoxy Resin	Amine Adduct
Specific Gravity	1.21 ±.1	1.74 ±.1
Flash Point	275°F/135°C	>200°F/>93°C
Viscosity Mixed	16,000cps at 25°C	23,500cps at 25°C
Shelf Life	1 year min.	1 year min.

Mixed Epoxy	
Heat Deflection Temperature (ASTM D 648-82)	144°F
Compressive Strength (ASTM D 695M 89)	18,500 psi
Tensile Strength (ASTM D 638)	5,500 psi at 25°C
Elongation (ASTM D 229)	0.57%
Shore "D" Hardness	90
Slant/Shear (ASTM C-881)	6,000 psi
Meets ASTM C 881-83	Types 1, 2 & 4, & 5
Not sensitive to UV light or heat	Class B, C, D, E & F
Viscosity	152,000cps @ 25°C

Cure Times For Anchor Bolt

Temperature (F°)	Initial Set Time (hrs.)	Bolt Up Time (hrs.)	Cure Time (hrs.)
40-50	5	12	72
51-60	4	8	48
61-70	3	6	36
71-80	2	4	24
>80	1	4	24

Initial set time is time adhesive must remain undisturbed. Bolt up time is time required before nuts may be tightened. Cure time is time required for adhesive to completely cure.