



CHEM-GEL 25

Two Component Epoxy Non-Sag Gel,
25% Elongation

PRODUCT DESCRIPTION

CHEM-GEL 25 is a two-component solvent-free, low modulus, moisture insensitive, thixotropic and non-sagging epoxy gel and has 25% elongation. Both resin and hardener components are formulated and pigmented. CHEM-GEL 25 meets ASTM C-881 Type I and II, Grade III, Class B & C. CHEM-GEL 25 is suitable for application as crack sealing compound on cracks, which are subjected to slight movements.

FIELDS OF APPLICATION

CHEM-GEL 25 is extensively used in the following applications:

- Used for bonding adhesive packers and sealing cracks as part of a crack injection system.
- Joining concrete-to-concrete, steel to concrete elements.
- Filling slip bricks to concrete.
- Fastening bolts into walls.
- As a gap filling adhesive.
- Filling and sealing bolt pockets.
- Bedding tiles.
- Leveling irregularities on concrete floors prior to application of floor coating and screeds.

PRODUCT FEATURES

- Ready to use work pack ensures correct mixing.
- Thixotropic consistency allows application vertical, overhead, etc. packers do not sag.
- Excellent adhesion. Adhesion maintained even in damp conditions.
- Non-slump.
- Excellent mechanical properties.
- Easy to use, trowels to a smooth finish.
- Cures under water.
- Elongation 25% suitable for sealing live cracks with small movements.

PACKAGING

Product	Packaging
CHEM-GEL 25	2 GALLON (7.57 LITERS) UNIT
	10 GALLON (37.85 LITERS) UNIT

TECHNICAL DATA

Technical Data for Unmixed Parts

Technical Data @ 25°C	Resin - Part A	Hardener - Part B
Solids, %	100%	100%
Color	White	Black
Density, Lb/Gal (Kg/L)	9.16 (1.16)	8.1 (0.98)
Shelf life	Two Years	Two Years
Mix ratio (A: B)	1:1 by volume	

Technical Data for Mixed Parts

Properties @ 25°C	Values	ASTM Method
Viscosity	Non-sagging gel	N/A
Density, Lb/Gal (Kg/L)	8.9 (1.07)	D-1475
Pot life @ 90 milliliter, minutes	40	C-881
Gel time (25 µ)	6 - 8 hours	N/A
Tensile strength @ 7 Days, Psi (MPa)	5070 (34.5)	D-638
Flexural strength @ 7 Days, Psi (MPa)	3010 (20.5)	C-348
Compressive strength @ 7 Days, Psi (MPa)	5070 (34.5)	D-695
Bond strength @ 7 Days, (24 hours)	1470 (10)	C-882
Elongation, %	25	D-638
Water absorption @ 24hours, %	0.35	D-570

APPLICATION DATA

Limitations: applications at ambient temperatures below 5°C is not recommended. Exposure to temperatures exceeding 65°C for prolonged period is not recommended.

Pre-treatment of Substrate:

Concrete Surfaces: the substrate must be clean, dry, free from grease or oil, etc. Laitance and loose particles must be removed by either sandblasting or mechanical grinding from the edges of the cracks.

Steel Surfaces: all steel surfaces to be bonded with CHEM-GEL 25 must be clean, dry, free from rust, oil, grease, etc. Shot blasting to Swedish Standard SA 2 1/2 is preferable to achieve a white metal finish prior to application.

Mixing: stir each component separately. Mix one part A and one part B by volume into a clean mixing container. Mix the epoxy with a slow speed drill with a mixing paddle attachment. Carefully scrape the sides and bottom of the pail during mixing. Blend for 3 minutes.

When Preparing Grout: Mix in one part of Silica Sand 0.8 – 1.2 mm by volume to one part of mixed CHEM-GEL 25.

Mix only quantities, which can be used within the pot life.

Notes:

- Large batches of epoxy will cure much faster than small batches.
- Mixed epoxy will cure much faster in hot weather than in cold weather.

Application:

As a Grout: fill the cavity with mortar, using a trowel, spatula or caulking gun. Tamp or strike-off level with the surrounding surface. When filling deep areas, limit each layer to one inch (25 mm) to avoid sagging on vertical overhead application.

Curing: initial setting is minimum 8 hours. Full cure in 3 days.

CLEANING

Remove uncured CHEM-GEL 25 from tools and equipment with a suitable solvent such as Xylene or Toluene immediately after use. Cured material may only be removed mechanically.

STORAGE

Store in a dry area, between 5°C and 35°C. Protect from direct sunlight. Shelf life is minimum two years in original un opened container.

SAFETY PRECAUTIONS

After full curing the product is physiologically harmless. Keep the resin and hardener away from the eyes, mouth and skin. Do not inhale vapors. Uncured mixture can cause irritation of the skin. The best precaution is to wear safety protective gloves, overall, mask and goggles while working. Skin contamination should be immediately cleaned with soap and plenty of water. The use of solvents should be avoided. If resin or hardener splashes into the eyes, wash immediately with running water. A Doctor must be visited in all cases.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

WARRANTY

LIMITED WARRANTY: International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

DISCLAIMER: The information contained herein is included for illustrative purposes only and, to the best of our knowledge, is accurate and reliable. International Chem-Crete Inc. is not under any circumstances liable to connection with the use of information. As International Chem-Crete Inc. has no control over the use to which others may put its products, it is recommended that the products be tested to determine the suitability for specific applications and/or our information is valid in particular circumstances. Responsibility remains with the architect or engineer, contractor and owner of the design, application and proper installation of each product. Specifier and user shall determine the suitability of the product for specific application and assume all responsibility in connection therewith. AM2419.

Manufactured By:



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