

## L43 CRACK FILLER

**ACR® L43 Crack Filler** is a two-component, surface applied, cementitious crystalline crack filling material for concrete and cement protection. When applied to concrete cracks that are no longer moving, the insoluble crystals react with the waterproofing material to form and develop in the water bearing capillaries, effectively blocking the passage of water and ensuring permanent water tightness throughout the life of the structure.

ACR L43 Crack Filler is **required** to be used for any TechCrete 2500 system for issuance of any of the TechCrete Limited Liability Material & Labor Warranties.



### TYPICAL APPLICATION

ACR L43 Crack Filler may be used on any cracks or voids in concrete or cement surfaces.



### PRODUCT PROPERTIES

- Light gray powder
- Non-toxic
- Working time - 20-30 minutes
- Hardening time - 4 hours
- Density 112.37 lb/ft<sup>3</sup> - 1.80 g/cm<sup>3</sup>



### PRECAUTIONS

- Do not use ACR Crack Filler on Control Joints or Cold Joints or cracks that are due to movements within the building (usually occurs due to lack of control joints or building movement).



### PERFORMANCE CHARACTERISTICS

ACR L43 Crack Filler is made up of 2 components. Part A the cementitious powder and Part B the reactive liquid. When Part A and B are mixed and applied to a concrete or cement surface, the material reacts with the lime in the concrete to create a penetrating waterproofing crystalline barrier. The crystals that are formed when the material is placed in the crack penetrate the capillaries of the surrounding concrete and prevent moisture from passing while still allowing the concrete to breathe. ACR L43 Crack Filler's crystals will be fully developed and functional after 7-10 days. Once the crystals are fully developed, the chemicals that penetrated into the surrounding existing concrete help to strengthen and reinforce the surrounding concrete. This means that cracks only need to be dry and free of debris, no routing or grinding is necessary to use ACR L43 Crack Filler.

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### APPLICATION

Use ACR Crack Filler only after completing all applications steps for TechCrete 2500 Waterproofing system application. This includes the application of TechCrete 2500 Waterproofing Agent, ACR Accelerating Agent and ACR Crack & Void. Please see the Technical Data sheet for TechCrete 2500 Waterproofing System for Concrete.

**NOTE: Any Alchemco system products should only be applied when the ambient temperature is 40°F (+4°C) and rising or 100°F (+38°C) and falling.**

### Application Rates

The application rate of ACR L43 Crack Filler will vary depending on the width and depth of the crack. A kit of Part A & Part B will make enough product to do from 100 lineal feet to 300 lineal feet of cracks. Large deep cracks will require more product and smaller, shallow cracks will require less product.

### APPLYING PRODUCT

1. Remove Part A (powder) and place in a plastic bucket. The bucket the material was supplied in can be used. Apply equal parts of Part A and Part B. Mix both components thoroughly. Mixing may be done manually or with a slow mixing blade.
2. **NOTE:** Application of the ACR L43 Crack Filler should only occur directly after ACR Accelerating Agent applied, has been washed and while the surface of the concrete is still wet. If the crack begins to dry, wet the area again. ACR L43 Crack Filler works best when applied to a wet surface.
3. Once the two components have been properly mixed, place the mixture into the grout bag that was provided within the container. The grout bag may be used with or without the metal tip. Once the material is in the grout bag begin application by slightly squeezing the grout bag to maintain an even flow into the crack. When properly mixed the material should flow out of the bag without much squeezing.

4. If the product begins to dry while be used a small amount of water may be used to make the product more workable.
5. **NOTE:** When applying ACR L43 Crack Filler make sure to move slowly enough to allow the material to flow to the bottom of the crack.
6. Apply enough material to the crack to slightly over-fill the crack. This will provide enough material into the crack as it settles.



7. Once ACR L43 Crack Filler has been allowed to sit for up to 10-15 minutes, using a wide putty knife or trowel remove excess material by scraping the surface. Do not remove any material from within the crack.
8. Once excess material has been removed then make another spray application of TechCrete 2500 Waterproofing Agent over the top of the crack.
9. **NOTE:** Do not walk or drive over the newly filled cracks for no less than 4 hours.

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### PERFORMANCE TIMELINE

When used in combination with TechCrete 2500, CretePro and BridgeDECK products, ACR L43 Crack Filler becomes integral with the products of the system which in turn create a bio-based modified sodium silicate gel-forming technology to stop water penetration. Sodium Silicate is often referred to as “liquid glass” and is a silicon-oxygen polymer containing ionic sodium (Na+) components. Sodium silicate is similar to carbon-based plastics since silicon-oxygen-silicon bonds between each monomer are covalent. The polymer-like nature of the sodium silicate matrix as well as the polar character of oxygen and sodium atoms allows for bonding of water molecules within the polymer matrix. The modified sodium silicate penetrates into and bonds with the concrete to create a barrier to water, stopping the water from within the concrete rather than on the surface. The chemical reaction that creates this barrier is catalytic in nature and **may require 3-5 days to reach full water stopping capabilities**. Full waterproofing should not be expected until complete gel formation has been achieved.

### LIMITATIONS

ACR L43 Crack Filler is not effective when used on cracks or joints that may experience constant or repeated movement. Moving joints or cracks require the use of an elastomeric sealant.



### PACKAGING

ACR L43 Crack Filler is supplied as a 2 component product kit. Part A (powder) in a bag and Part B (liquid) in a bottle. Both are placed in a 5 gallon pail along with a grout bag for application.

- 5 gallon pail kit



### SHELF LIFE & STORAGE

ACR L43 Crack Filler should be stored in the same manner as cement in a cool dry place. In unopened and undamaged original packaging, this product has a shelf life of 2 years.



### WARRANTY & SYSTEMS

ACR L43 Crack Filler does not have its own warranty, but becomes part of the warranty for whatever system it is used in combination with.

For additional information about the Alchemco system specifications or available warranties, either contact your local Alchemco distributor or Alchemco's Technical Department at [technical@alchemco.com](mailto:technical@alchemco.com) or call 800-610-2895.

**WARNINGS**



**DANGER!**

This product contains cement which is alkaline and may be harmful if swallowed. Wash hands, face and any exposed skin thoroughly after handling. Keep container tightly closed. Do not eat, drink or smoke when using this product. Wear appropriate eye, skin and breathing protection when using this product. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**KEEP OUT OF REACH OF CHILDREN!**

**IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth.**

*See Safety Data Sheet for further details regarding safe use of this product. Safety Data Sheets for any Alchemco product may be obtained by contacting Alchemco, 3532 Mayland Court, Henrico, VA 23233. 800-610-2895 or emailing [technical@alchemco.com](mailto:technical@alchemco.com) or calling*

**CHEMTREC 800-424-9300 (US)  
703-741-5970 (International).**



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