

CrownFlex™ AR Joint Sealer

Product Description Sheet No. 502

Load Bearing Joint Filler Seals and Protects Control Joints In Concrete Floors & Secondary Containment Areas From Mild Acids

DESCRIPTION

CrownFlex™ AR Joint Sealer, (Product No. 502) is a 100% Solids, Moisture-insensitive, Non-shrink, two (2) Component Modified Epoxy Joint Sealer.

WHERE TO USE

In Dry or Damp Concrete Saw Cut or Control Joints for Foot, Vehicular Pneumatic Tire and Hard Plastic Wheel Traffic areas that are exposed to Mild Acid Spillages.

TYPICAL INDUSTRIES OF USE:

- Chemical Manufacturing
- Battery Storage Areas
- Pharmaceutical
- Secondary Containment Areas
- Metal Etching
- Areas with Mild Acid Exposure

ADVANTAGES

- Available in Large Volume Cartridges
- Available in Bulk Containers
- Good Working Time
- Nearly No Odor
- No VOC's – 100% Solids
- Non-Shrinking
- Moisture-insensitive Formula
- Fast Cure Rate
- Cures Down to 40°F (4°C)
- Excellent Strength Properties
- High Load Bearing Strength
- Excellent Impact Resistant
- Chemical and Waterproofs
- Easy to Place and Shave
- Cost Effective Joint Sealing System

Typical Data for CrownFlex AR Joint Sealer

(Material and Curing Conditions at 23°C (73°F) unless noted, 50% R.H.)

COLOR 10 Standard Colors **VISCOSITY** 900-1,200 cps.

POTLIFE 10-14 minutes **CONSISTENCY** Flowable
Fills Void Leaving Small Bead

TACK-FREE TIME

Substrate Temperature	40°F *	73°F	90°F
	8 – 10 hrs	4 – 5 hrs	3 – 3.5 hrs

TENSILE PROPERTIES (ASTM D638) 7 Days

Tensile Strength	1,800 psi
Elongation at Break	20 - 30 %

COMPRESSIVE STRENGTH (ASTM D695)

	40°F *	73°F	90°F
1 Day	1,900 psi	2,700 psi	2,900 psi
7 Days	3,300 psi	3,400 psi	3,400 psi

PULL OFF STRENGTH - ADHESION TO CONCRETE (ASTM D4541)

	40°F *	73°F	90°F
7 Days	255 psi	280 psi	285 psi

HARDNESS, SHORE D (ASTM D2240)

7 Days 30 - 45

WATER ABSORPTION (D570)

7 Days 0.40%

SHELF LIFE 1.0 years in original unopened containers

PACKAGING **Pails** – 3, 5, 15 Gal Units (231 IN³/Gal)
Cartridge Package – 57 in³

CARTRIDGE PUMP UNIT - The Jake Power Cartridge Dispensing Unit Mixes the Epoxy Through a Static Mix Tube Eliminating Potlife and Measuring Problems.

VOLUME MIX RATIO 2 TO 1

Typical Chemical Resistance of Spillage Environments that will be cleaned up within 72 hours after initial exposure.

Phosphoric Acid (0-40%)	Silicic Acid
Pickling Acids, Sulfuric & HCl	Sodium Hydroxide (0-50%)
Potassium Chloride	Sulfuric Acid (0-40%)
Pulp Mill Liquors	Tannic Acid

* Pre-conditioned epoxy to 90°F (32°C) before mixing.

How To Apply: CrownFlex AR Joint Sealer

SURFACE PREPARATION

All inner joint surfaces must be free of dust, coatings, grease, sealants, waxes and all other contaminants and have all deteriorated concrete removed to a sound and clean surface. Typical removal methods include dust-free abrasive blasting or enlarging joint width by saw cutting. Protect joints from contamination after cleaning and prior to product placement.

JOINT DESIGN

Follow ACI's Standard Joint Specification for sizing and filling the joint depth to 25% of the concrete thickness. If the crack at the bottom of the joint is open, materials such as backer rod may be used to prevent epoxy from seeping out of joint void to be filled.

PRECONDITIONING POLYMER

When temperatures drop polymers typically thicken and it becomes harder to pour the product. When the temperatures are warmer, they typically become thinner. To improve the flowability before mixing product precondition product temperature at 73°F (20°C) or higher. When the substrate temperatures are 60°F (15°C) or lower preheat each epoxy component to 90°F (32°C) before mixing.

Caution: When preheating epoxy to be applied by pouring method the potlife will be reduced by about 50%. When packaged in cartridges the epoxy is mixed through a static mixing tube and there is no potlife issue to be concerned about.

MIXING FOR POURING METHOD

Pre-mix Component "A", (when pigmented) then pour Component "B" into "A" and mix for 60 seconds (until one even colors develops) with a low speed paddle attached to a drill (400-600 rpm). The mixed product is ready for immediate placement.

NO PREMIXING IS REQUIRED FOR PRODUCT PACKAGED IN CARTRIDGES.

COVERAGE

Product coverage is depended upon the width, depth and length of the joint to be filled. One gallon contains 231 in³ and one cartridge unit contains 57 in³ of mixed product.

APPLICATION METHODS

The product has a convenience mix ratio of 2 to 1 by volume and maybe poured or pumped into the joint void. For additional equipment information, contact Crown Polymers.

LIMITATIONS

- Substrate Temperature Must be 40°F (4°C) or Above.
- Minimum Application Temperature is 40°F (4°C).
- DO NOT APPLY on WET Substrate.
- DO NOT THIN – Solvents will prevent proper cure.
- Do Not Add Aggregate to Product or Place Aggregate in Joint Before Filling Joint.
- Pre-condition Polymer as Needed.

CAUTION

Component "A"- Irritant

Contains epoxy resins. Prolonged contact with skin may cause irritation. Avoid contact with eyes.

Component "B" - Corrosive

Contains amines. Contact with skin may cause severe burns. Avoid eye contact. Product is a strong sensitizer

IMPORTANT INFORMATION

Use of safety goggles, chemical-resistant gloves, adequate ventilation and NIOSH/OSHA approved respirator is recommended.

CLEAN UP

In case of spills wear suitable protective equipment, contain spill, and collect with absorbent material, place in suitable container. Ventilate area. Avoid contact. Dispose according to applicable local, state, and federal regulations.

FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. For respiratory problems, remove person to fresh air. Contact Physician Immediately. Wash clothing before re-use.

Consult Material Safety Data Sheet for More Information

FOR INDUSTRIAL USE ONLY

KEEP OUT OF REACH OF CHILDREN



LIMITED WARRANTY - "Crown Polymers, LLC warrants its products to be free of manufacturing defects, to be of good quality, and that they will meet Crown Polymers current physical published properties when applied in accordance with Crown Polymers written directions and tested in accordance with ACI, ASTM and Crown Polymers Standards. Product proved to be defective will be replaced. There are no other warranties by Crown Polymers, LLC of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers, LLC shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, from any other cause whatsoever. Crown Polymers will not be responsible for use of this product in a manner to infringe on any patent held by others.

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