



# PRODUCT DATA SHEET

## BP81

CSIS

Semi-Rigid Flexible Epoxy Joint Filler

**DESCRIPTION:** BP81 is a gray, two-part, Pourable consistency, premium-grade, moisture insensitive, epoxy joint filler formulation. When cured, it is semirigid, with a Shore D Hardness of 60.

**USES:** BP81 was developed for use as a joint filler for saw cuts and construction joints in interior concrete floors subject to load bearing, wear or impact conditions, such as warehouse and industrial plants. These are floors which are typically subjected to hardwheeled vehicles (such as forklifts).

BP81 is also suitable for filling or repairing random cracks in slabs or as an embedded control wire sealant.

### FEATURES

- Fast setting, pourable and self-leveling makes it ideal for saw cut joints.
- As a semi-rigid filler, it protects slab edges from spalling, yet allows sufficient flexibility for interior slabs.

### LINEAL FEET PER UNIT:

Joint Depth	Joint Width		
	1/8"	3/16"	1/4"
1"	154	102	77
1-1/4"	123	82	61
1-1/2"	102	68	51
1-3/4"	88	58	43
2"	77	51	38

### LINEAL METERS PER UNIT

Joint Depth	Joint Width	
	3mm	6mm
25mm	50 meters	25 meters
32mm	39 meters	20 meters
38mm	33 meters	17 meters
44mm	29 meters	14 meters
51mm	25 meters	12 meters

**PACKAGING:** 1 gallon (3.79 liter) unit  
10 gallon (37.85 liter) unit

**COVERAGE:** 231 cu. in. (3,785 cu.cm)  
per 1 gal. unit

Typical Physical Property	Test Method	ACI Report 302.1	Typical Value
Solids % by Weight	ASTM D 1259	100%, min	100%
Mix Ratio (A:B)	By volume		1:1
Color (A & B mixed)	Visual		Gray
Consistency	Appearance		Pourable
Pot Life (1 gal.unit) minutes	ASTM C 881		20 mins.
Thin film Tack free time, hours	ASTM C 879		3.5 hrs.
Tensile adhesion to concrete at 3 days: 75° (24°C), PSI	ASTM D 5329		290 PSI
Hardness, Shore D (7 days)	ASTM D 2240	50, min.	60
Shore A (7 days)			95
Tensile strength: 75° (24°C) (3 days), PSI	ASTM D 638		660 PSI
75° (24°C) (7 days), PSI			770 PSI
Elongation: 75° (24°C) (3 days), %	ASTM D 638		72%
75° (24°C) (7 days), %			53%
Water Absorption: 75° (24°C) (24 hrs), % by weight	ASTM D 570		0.56%
Shrinkage	ASTM D 2566		Negligible

**Color (mixed):** Gray

**Shelf Life:** 2 years (in unopened, undamaged container)

\*All technical data is typical information, but may vary due to test methods, conditions and operators.

## APPLICATION

**Joint Preparation and Design...** Joints must be level, clean and free of frost and standing water. Remove curing compounds, form release agents, old sealant and/or contaminants from joint faces by sandblasting or mechanical abrading. Blow any dust, dirt and laitance out of the joint with oil-free compressed air prior to application. To prevent run out from cracks in the bottom of joints, apply a small amount of fine dry sand. Install full depth. Do not use with soft backer rod. Tape joint sides to allow for easy removal of overfill.

Joint frequency, width and depth shall be as specified by the design engineer. It is suggested that the width of a typical saw cut shall be 1/4" (6.4mm) maximum. The suggested depth of the saw cut should be 25% of the slab thickness, but no less than 1" (25.4mm) in depth.

**Mixing...** Condition all components to 60-85°F for 24 hours prior to use. Pre-mix each component. Mechanically mix at slow speed (600-900 rpm) using a drill and Jiffy® Blade or drum mixer for 3 minutes or until completely mixed while scraping the sides to ensure complete blending of components. The mixed product should be uniform gray in color and not show streaks. Avoid air entrapment. Mix only very small quantities by hand for a minimum of 3 minutes or until sufficiently blended together using the supplied stirring stick. Scrape the sides of the container to ensure complete blending of components. Mix only the amount of epoxy that can be applied within the product's potlife. Potlife will decrease as the ambient temperature and/or mass size increases.

**Dispensing...** Pour properly mixed product directly from can, dispense through a bulk caulking gun or positive displacement pump. Fill joint to top. If leakage occurs, reapply as necessary prior to product becoming tack-free.

## LIMITED WARRANTY

Border Construction Specialties, LLC (BCS), warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order." Read complete warranty. Copy furnished upon request.

## Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. BCS cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As BCS has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.

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**Clean-up...** Prior to curing, clean all tools and equipment with toluene or xylene. Spilled material must be collected with absorbent material and disposed of in accordance with local, state and federal regulations. Remove solid material mechanically.

## SAFETY & TOXICITY

Avoid direct contact with this product. Both components may cause irritation as well as skin and respiratory sensitization. Component B is corrosive and may cause tissue destruction. In case of contact, immediately flush affected areas thoroughly with water for at least 15 minutes. Seek immediate medical attention. Unused epoxy will generate excessive heat, especially in large quantities. Unused epoxy should be mixed with dry sand in the container to help lower the heat. Refer to Material Safety Data Sheet for complete health and safety information.

## PRECAUTIONS

Do not use in vertical or sloping joints, or in areas subject to continuous water immersion. Do not use in joints designed for any significant movement (i.e. expansion or contraction joints). Do not apply when concrete temperature is below 40°F (4°C). This product is recommended for interior use only. It is not suitable for areas subject to sudden extreme temperature changes. Concrete must be a minimum of 28 days old, but for optimal results, allow the concrete to cure for a minimum of 56 days prior to installation. BP81 may discolor during curing when applied in areas heated by artificial heaters, which generate carbon dioxide, or when exposed to certain UV lighting systems or sunlight.

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