



PRODUCT DATA

# Bostik® Chem-Calk® 600

ONE-COMPONENT, ACRYLIC LATEX—GUN GRADE

DATE OF LAST REVISION: 07/15/05

### PRODUCT

Bostik® Chem-Calk® 600 is a one-component acrylic latex caulking compound. Gun grade.

### MANUFACTURER

**Bostik, Inc.**  
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Middleton, MA 01949-2128 USA  
Telephone: (888) 603-8558  
In MA: (978) 777-0100  
Technical Service: (800) 523-2678  
Technical Fax: (215) 957-0716  
<http://www.bostik-us.com>

### APPLICABLE STANDARDS THAT ARE MET

- CARB and SCAQMD Compliant.
- Meets VOC Requirements for OTC Regulation
- ASTM C834-76, standard specification for latex sealing compounds
- CAN/CGSB-19.17-M90
- LEED certified—meets Indoor Air Quality Section 4.1—Low Emitting Materials Rating

### PRODUCT DESCRIPTION

Bostik® Chem-Calk® 600 is a one-component, acrylic latex caulking compound suitable for general purpose interior or limited exterior use in residential, architectural and industrial applications where no movement to very slight movement is anticipated.

It has a creamy, homogenous consistency allowing for easy gunning and tooling. Its non-sag characteristics allows it to be used in various vertical applications. NOT recommended for sealing horizontal surfaces or areas subject to water immersion or dynamic joints, such as expansion joints.

Chem-Calk® 600 must be protected from freezing and precipitation until fully cured, usually 24 hours. Surfaces to receive caulk must be 40°F and rising, and free from frost and/or condensation.

Its low odor and quick skinning properties allows it to be used on interiors where the odor of other generic caulks might be considered offensive. Chem-Calk® 600 formulation offers the user mold and mildew resistance, outstanding flexibility and long life.

### BASIC USES

- Interior perimeter sealing of window and door frames, sheet rock, and ceiling to wall joints
- Fill voids between dissimilar building materials such as pipes, bathroom and kitchen fixtures
- Paintable with a good quality acrylic latex or oil based paint after one hour of cure time



### CHEM-CALK 600 TYPICAL PROPERTIES

#### Test Requirements

Extrudability	2 gm./sec, minimum	Pass
Artificial Weathering:		
Wash Out	None, after weathering	Pass
Slump	None, after weathering	Pass
Cracking	None, after weathering	Pass
Discoloration	As acceptable to purchaser	Pass
Adhesion Loss	25% max. (estimated on basis of a total possible bond area of 7.2 in. (45.16 cm <sup>2</sup> ))	Pass
Volume Shrinkage	30% max.	Pass
Low Temperature	No cracking through to substrate or adhesion loss	Pass
Recovery	75% min. (average of all specimens)	Pass
Adhesion Loss	25% max. (average of all specimens)	Pass
Slump	0.15 in. (4 mm) max (on each specimen)	Pass
Stain Index	3 max.	Pass
Tack-Free Time	No material adhering to plastic strip	Pass

### FEATURES AND BENEFITS

- Low Odor
- Acrylic Latex
- Easy gunning
- Non-sag
- CARB / SCAQMD
- Paintable
- Non-offensive odors
- Soap and water cleanup
- Easier to use
- For use on vertical applications only
- Can use in any state in the USA
- Transitional sealing

## APPLICATION LIMITATIONS

- Construction substrates have become complex and diverse by nature and origin. Substrate chemistries and structures can interfere with adhesive performances of the sealant. **Adhesion to Substrate Pretest (ASP) is therefore MANDATORY to assess any adhesion and sealing characteristics—see *Adhesion to Substrates Pretest section and see Installation Protocol section*. This must be done pre-installation to avoid potential failures.** Call Technical Service for more information about surface preparation and possible priming.
- Do not apply over damp, contaminated, loose surfaces (See *Installation Protocol and Surface Preparation*), old sealants or other foreign substances that may impair the adhesion bond. Avoid air entrapment.
- Porous substrates such as but not limited to marble, limestone and granite might absorb components of the Bostik® Chem-Calk® 600 leading to staining of the substrate. **ASP with sufficient aging is mandatory to assess this potential issue.**
- The ultimate performance of Bostik® Chem-Calk® 600 depends on proper joint design and proper application with joint surfaces properly prepared (See *Installation Protocol*). Bostik® Chem-Calk® 600 is not recommended for joints with dimension less than or greater than what is recommended below. (See *Installation Protocol—Joint Design section*.)
- Bostik® Chem-Calk® 600 must not be used to seal narrow joints, fillet joints and face of nail holes.
- Smearing and feathering Bostik® Chem-Calk® 600 over joints is not recommended.
- Bostik® Chem-Calk® 600 is not recommended for horizontal joints or traffic-bearing joints where abrasion resistance is required (walkways, driveways, runways, etc.). Please refer to Chem-Calk® 950 for this application.
- Bostik® Chem-Calk® 600 is not recommended for continuous immersion in water or any other fluid. When fully cured avoid exposure, even incidental, to fuels, chlorinated, acid and alkaline solutions. Bostik® Chem-Calk® 600 is not recommended for exterior or interior sealing below the waterline; please refer to Bostik® 940 Fast Set for marine applications.
- Contact of Bostik® Chem-Calk® 600 with asphalts (i.e., back coating of window flashing, etc.) and other filler compounds impregnated with oil, asphalt, tar, etc., may deteriorate the cohesive strength of the substrate and ultimately compromise the seal.
- Until the sealant is fully cured, do not expose the sealant to any mechanical stress. Uncured sealant will not respond properly to cyclic expansion and contraction of the joint specified for the cured sealant only.
- Freshly applied (uncured) Chem-Calk® 600 may attract dust or dirt from the job site which may effect the appearance of the sealant. Check tack-free time to reduce dirt pickup.
- Bostik® Chem-Calk® 600 is not recommended for glazing applications.
- Bostik® Chem-Calk® 600 is not RTV silicone and therefore is suitable for painting. Paint chemistries and flexibility characteristics of the paint films over the sealant may affect wetting, adhesion and integrity of the paint layer; and it is therefore **mandatory** to pretest the paint or other coating over the Bostik® Chem-Calk® 600 to ensure the successful compatibility between the sealant and the paint/coating after a sufficient amount of time. See your paint manufacturer for specifications and limitations and call our Technical Service for more information.

## INSTALLATION PROTOCOL

### Joint Design:

In general, more joint movement can be accommodated in a thin bead of sealant than a thick bead. Bostik® Chem-Calk® 600 sealant should be no thicker than 1/2" (12.7mm) and no thinner than 1/4" (6.4mm). In joints between 1/2" and 1", the ratio of sealant width to depth should be approximately 2:1. Sealant depth in joints between 1/4" and 1/2" should be 1/4" deep. Joints with dynamic movement should not be designed in widths less than 1/4".

### Surface Preparation:

See limitations about surface preparation. Surfaces must be structurally clean, dry (no frost) and structurally sound, free of contaminants, including but not limited to dust, dirt, loose particles, tar, asphalt, rust, mill oil, etc. If substrate is painted or coated, scrape away all loose and weakly bonded paint or coating. Any paint or coating that cannot be removed must be tested to verify adhesion of the sealant or to determine the appropriate surface preparation if needed. (See *ASP section* on next page for details.)

To remove laitance and any other loose material, clean concrete, stone or other masonry materials with compatible solvent by washing, grinding, sandblasting or wire brushing as necessary. Do not use water to clean substrates. Dust must be thoroughly removed after cleaning.

### Bond Breaking Rods and Tapes:

Bond breakers, including but not limited to closed-cell polyethylene backer rods, are used to control depth of the sealant bead, provide a firm tooling surface and avoid three-sided adhesion. Where the depth of joint prevents use of backer rods, a polyethylene strip or tape must be used as a bond breaker to prevent 3-sided adhesion. Do not prime or damage the surface of the bond breaker. Refer to instructions given by rod and tape manufacturers for the correct backer rod and tape size related to joint size.

### Priming:

In general, application of Bostik® Chem-Calk® 600 does not require priming the substrates. However, some substrates may require a Bostik primer. It is the user's responsibility to check adhesion of the cured sealant on typical test joints at the project site before and also during application as weather conditions may affect the adhesion results (See *ASP section* on next page.). Refer to Bostik Primer product data sheet or call Technical Service for proper selection and application of Bostik Primers.

### Tooling:

Bostik® Chem-Calk® 600 comes ready-to-use. Cut spout or tip to desired bead size. Apply moderate pressure to break seal inside the nozzle. Apply by using a professional caulking gun such as Bostik® K410042TG. Use opened cartridges and sausages the same day they are opened. Apply Bostik® Chem-Calk® 600 sealant in a continuous operation using positive pressure to the bottom of the joint to properly fill and seal the joint. When applying, avoid air entrapment and overlapping. Tool the sealant before the skin forms with adequate pressure to spread the sealant against the backup material at the bottom and sides of the joint. A dry tool with a concave profile is recommended for that operation. Do not use water or soapy water for this operation. Avoid smearing and feathering of the sealant to allow full performance of the cured seam. Excess sealant should be dry-wiped or joints should be properly taped.

### Cleaning:

Easily removable with water before drying. After wiping uncured sealant from substrates and tools, remaining uncured sealant can be removed by using soap and water or Xylene, Toluene or similar aromatic solvents. Please refer to the MSDSs provided for these solvents before use. Bostik® Hand and Tool towels can also remove uncured sealant. Cured sealant is usually very difficult to remove without altering or damaging the surface to which the sealant has been misapplied. Cured sealant can be removed by abrasion or other mechanical means (scrapers, putty knives).

## Curing Time:

Bostik® Chem-Calk® 600 is an acrylic latex caulk formulated for the professional painter. Usually tack free in 20 minutes and paintable after one hour, its low odor and dirt resistance allows for use in many interior environments. Chem-Calk® 600 contains no oils insuring that it will not bleed, discolor or stain adjacent surfaces or latex paints.

## Painting and Coating:

Bostik® Chem-Calk® 600 is not RTV silicone and therefore is suitable for painting. Paint chemistries and flexibility characteristics of the paint films over the sealant may affect wetting, adhesion and integrity of the paint layer, and it is therefore **mandatory** to pretest the paint or other coating over the Bostik® Chem-Calk® 600 to ensure the successful compatibility between the sealant and the paint/coating after a sufficient amount of time. See your paint manufacturer for specifications and limitations and call our Technical Service for more information.

## Maintenance:

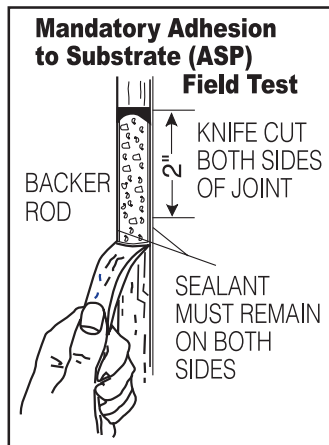
If the sealant becomes damaged, replace the damaged portion by removing the old sealant completely, cleaning the surfaces and reapplying a fresh and appropriate amount of new sealant in accordance with the directions and information contained in this data sheet.

## MANDATORY ADHESION TO SUBSTRATES PRETEST—(ASP)

A hand pull test must be run before the job starts and at regular intervals during the job. It must be run on the job site after the sealant is fully cured, usually within 7 to 21 days. (Adhesion may develop fully after at least 14 days.)

The hand pull test procedure is as follows:

1. Make a knife cut horizontally from one side of the joint to the other.
2. Make two vertical cuts approximately two inches long, at the sides of the joint, meeting the horizontal cut at the top of the two-inch cuts.
3. Grasp the two-inch piece of sealant firmly between the fingers and pull down at a 90° angle or more, and try to pull the uncut sealant out of the joint.
4. If adhesion is sufficient, the sealant should tear cohesively in itself.
5. Sealant may be replaced by applying more sealant in the same manner as it was originally applied. Care should be taken to ensure that the new sealant is in contact with the original, and that the original sealant surfaces are clean, so that a proper bond between the new and old sealant will be obtained.



## STORAGE • PACKAGING • SHELF LIFE

Shelf life of Bostik® Chem-Calk® 600 must be checked prior to using the product; do not use beyond the date of manufacturing found on the packaging. Caulk past its shelf life may not perform or adhere as described by this data sheet. If you are unsure of the expiration date of your Bostik product, please call customer service at 1-888-603-8558 to **check if the product is still within its shelf life.**

Chem-Calk® 600 must be protected from freezing and precipitation until fully cured, usually 24 hours. Surfaces to receive caulk must be 40°F and rising, and free from frost and /or condensation.

Chem-Calk® 600 must be protected from from freezing in storage and during transit.

## COLORS

White	24-10.1 oz. cartridges per case
	5 gallon pail
	52 gallon drum

## AVAILABILITY

Available from authorized Bostik distributors. Go to [www.bostik-us.com](http://www.bostik-us.com) and check on our distributor locator for the closest distributor in your location or call customer service at 1-888-603-8556.

## HEALTH AND SAFETY

Please refer to the MSDS for First Aid Information. Most current MSDS's can be found on Bostik's website at [www.bostik-us.com](http://www.bostik-us.com) or call customer service at 1-888-603-8556.

## TECHNICAL SERVICE

TECH SERVICE phone number: 1-800-523-2678.

Field visits by Bostik personnel, Bostik manufacturer representatives or Bostik authorized distributor personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

## WARRANTY (Limited Warranty) — IMPORTANT NOTICE

All statements, technical information and recommendations set forth herein are based on tests which Bostik believes to be reliable. However, Bostik does not guarantee their accuracy or completeness. The buyer and/or user should conduct its own tests of this product before use to determine proper preparation technique and suitability for proposed application. Any sales of this product shall be on terms and conditions set forth on Bostik's order acknowledgment. Bostik warrants that the product conforms with Bostik written specifications and is free from defects at the time it leaves Bostik's control. BOSTIK DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED AND/OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE BUYER'S SOLE REMEDY FOR NONCOMPLIANCE WITH THIS WARRANTY SHALL BE FOR THE REPLACEMENT OF THE PRODUCT OR REFUND OF THE BUYER'S PURCHASE PRICE. IN NO CASE WILL BOSTIK BE LIABLE FOR DIRECT, CONSEQUENTIAL ECONOMIC OR OTHER DAMAGES.

**COVERAGE FOR 10.3 FL. OZ. CARTRIDGE (304 ml.)**

		Width							
		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
Depth	1/8"	99	50	33	25	20	17	14	13
	1/4"		25	20	13	10	8	7	6
	3/8"			11	8	7	6	5	4
	1/2"				6	5	4	4	3

LINEAR FEET PER 10.3 FL. OZ. CARTRIDGE

**COVERAGE FOR 20 FL. OZ. SAUSAGE (600 ml)**

		Width							
		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
Depth	1/8"	192	97	63	48	39	31	27	24
	1/4"		48	39	24	19	15	14	12
	3/8"			21	15	11	10	9	7
	1/2"				11	10	8	7	5

LINEAR FEET PER 20 FL. OZ. SAUSAGE

NOTE: All values are approximations and can vary due to joint dimension variations, porosity, and texture of substrates.

**COVERAGE CHART FOR 5 GALLON PAIL (18.9 L)**

		Width							
		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
Depth	1/8"	6150	3100	2050	1540	1230	1025	870	770
	1/4"		1540	1240	770	615	510	440	370
	3/8"			680	510	410	310	290	245
	1/2"				370	305	245	220	185

LINEAR FEET PER 5 GALLON PAIL

**COVERAGE CHART FOR 52 GALLON DRUM (196.8 L)**

		Width							
		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
Depth	1/8"		63960	32240	16016	12792	10660	9048	8008
	1/4"			12896	8008	6396	5304	4523	3848
	3/8"			7072	5304	4264	3224	2907	2548
	1/2"				3848	3172	2548	2261	1294

LINEAR FEET PER 52 GALLON DRUM