

## **BUILDING TRUST**

# PRODUCT DATA SHEET

# **Swellstop**

Water Swellable Sealant

#### PRODUCT DESCRIPTION

Swellstop is a butyl polymer based sealant tape.

#### **USES**

Cold joint in foundation slabs or below grade walls

- Precast concrete wall panel systems
- Septic tanks
- Sanitary and storm sewer manholes
- Utility vaults, portable water tanks and box culverts
- Pipes (round, oval, flat-base elliptical and arch types)
- Wet wells

Please note that Swellstop is not an expansion joint material and should not be used as one. Swellstop requires no special handling equipment. It is clean to the touch and does not contain any material that can discolor or irritate the skin.

### **CHARACTERISTICS / ADVANTAGES**

- Swellstop is a water-swellable, waterproofing sealant designed for use on many types of poured-in-place and below grade precast concrete applications.
- On exposure to water it will begin to swell to seal any exposed gaps in concrete joints. Swellstop has excellent adhesion to clean, dry concrete. It is specifically intended for non-moving joints. It features all weather application and is engineered for use under most temperature conditions.
- Swellstop stays flexible in cold weather without shrinking or hardening and does not require heating for application. In hot weather, Swellstop remains pliable and does not become spongy.

#### PRODUCT INFORMATION

Packaging	Swellstop: $3/4$ " x 1" X $16'$ -8" roll (6 rolls or $100'$ per carton) Swellstop II: $3/8$ " x $3/4$ " x $25'$ roll (6 rolls or $150'$ per carton) Swellstop SC: $1/2$ " x $3/4$ " x $1$ - $1/4$ "x $20'$ roll (6 rolls or $120'$ per carton)	
Appearance / Color	Black Odor: none	(ASTM D-1729)
Shelf Life	2 years when stored in a cool, dark, and dry environment.	
Storage Conditions	Store in a cool, dark, and dry environment.	
Density	Specific Gravity: 1.60 + 0.05 g/cm3 Weight per Gallon: 13.3 pounds per gallon	(ASTM D-297)
Diameter		

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Change of volume	% Solids	
	99% after 4 hours @ 212°F	(ASTM C-771)
Swelling	After 3 days water immersion = > 25% by weight After 2 months water immersion = 140-170% by weight	(TP-001)
Ambient Air Temperature	-40°F to 215°F	
Substrate Temperature	5°F to 125°F	

#### **BASIS OF PRODUCT DATA**

Results may differ based upon statistical variations depending upon mixing methods and equipment. temperature, application methods, test methods, actual site conditions and curing conditions.

#### LIMITATIONS

Swellstop waterstop should be used in below grade, nonmoving joints only and is not appropriate for expansion joint applications.

Cracking and/or spalling of the concrete can be caused by the expansion pressure of Swellstop waterstop. A minimum 2" of concrete coverage is recommended. Increase this coverage if using lightweight or low strength concrete (< 3,500 PSI compressive strength).

Swellstop waterstop requires the presence of moisture to initiate and maintain expansion. The expansion process begins immediately when Swellstop contacts water.

#### **ENVIRONMENTAL, HEALTH AND SAFETY**

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

#### APPLICATION INSTRUCTIONS

#### SUBSTRATE PREPARATION

Joint surfaces must be clean and dry. For best results, apply adhesive primer to the joint surface (especially vertical joints) before applying Swellstop. The primer creates a tacky surface to ensure a firm bond to the concrete.

Swellstop is installed after the form is stripped from the first pour and before the second pour is placed. A

keyway may be formed in the first pour with a slight draft angle at the joint face to accept the Swellstop, this will reduce the risk of the profile shifting during concrete placement. This may increase the chance of Swellstop being exposed to pooling water. However, Swellstop does not need to be located in a keyway. The concrete surface should be smooth, dry, and cured for a minimum of 24 hours prior to Swellstop application.

Brush apply a 2" wide continuous coat of Swellstop Primer Adhesive along the joint and allow it to dry for two hours before applying the Swellstop waterstop. The primer adhesive provides a dust free, tacky surface to improve the adhesion of Swellstop to the concrete.

#### APPLICATION METHOD / TOOLS

- Swellstop Primer Adhesive and Swellstop waterstop should be applied on the same day.
- Press Swellstop waterstop firmly and continuously in place over and along the primed area. Swellstop can also be mechanically fastened to concrete using concrete nails in vertical or overhead applications. This should be done in addition to using the primer adhesive. Suggested fastener spacing is approximately 12" on center.
- Swellstop adheres to the butt end of the previous concrete pour and should be positioned a minimum of 2-inches from the exterior joint surface. Concrete cut nails and/or adhesive must be used to secure Swellstop in place to prevent displacement during the pour.
- Swellstop may also be installed in a cast-in-place recess at the exterior side of the joint. Precautions must be taken to protect the product from hydration prior to backfilling in this situation. Backfill must be compacted to 85% modified proctor minimum adjacent to the ioint. The recess at the exterior of the joint should match the dimension of the Swellston.
- Swellstop waterstop should be spliced by butting the ends together with no separation or air pockets. Do not overlap the ends of the waterstop. It is not necessary to miter cut the Swellstop at these intersections. The pliable nature of Swellstop permits it to be bent around corners eliminating a 90° splice if desired. Place in maximum practical lengths to minimize splicing.
- Protect waterstop from moisture, dirt, oil, and sunlight during the progress of the work. Do not remove



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separation paper from Swellstop waterstop until just prior to the second concrete pour. Inspect Swellstop for premature swell, discontinuity, and debris contamination immediately prior to the second concrete pour. If swelling and/or damage has occurred, remove and replace the material with new.

 Place and thoroughly vibrate concrete, taking care not to disturb or displace the waterstop. Do not allow vibrator to contact the Swellstop.

#### **OTHER RESTRICTIONS**

See Legal Disclaimer.

#### **LEGAL DISCLAIMER**

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD

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#### BY OTHERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 1-800-933-7452.

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