BUILDING TRUST

PRODUCT DATA SHEET

Sika Boom®-405 Water Stop

Fast-curing, two-part, self-expanding polyurethane foam for watertight seals

PRODUCT DESCRIPTION

Sika Boom®-405 Water Stop is a two-part, fast curing, self-expanding polyurethane sealing foam that doesn't need ambient moisture to cure. Its high density and very fine, predominantly closed cell structure lead to a watertight seal in wall openings for pipes, ducts or pipe connections. The special packaging allows the application to be interrupted and then resumed by replacing the nozzle.

USES

Sika Boom®-405 Water Stop is used above and below ground.
Sika Boom®-405 Water Stop is used for interior and exterior applications.
Sika Boom®-405 Water Stop is used for sealing:

- Wall openings for pipes or ducts.
- Cable ducts.
- Prefabricated concrete elements.
- Pipe connections, such as those in a manhole.
- Pipe plug seals for diameters up to 200 mm.

CHARACTERISTICS / ADVANTAGES

- Tested for up to 1 bar water pressure.
- Multiple instances of partial discharge possible.
- Ready to apply (no pre-activation needed).
- Very fast curing.
- Good dimensional stability when cured (no shrinkage or post-expansion).
- Good thermal insulation.
- Can be cut, trimmed, sanded and painted.

ENVIRONMENTAL INFORMATION

- VOC emission classification GEV Emicode EC1^{plus}

APPROVALS / STANDARDS

- Reaction to Fire Classification DIN 4102-1, Sika-Boom®-405 Water Stop, MPA Hannover, Report No. P-NDS04-1365.
- Sealing test ÖNORM B 5013-3, Sika Boom®-405 Water Stop, Ofi, Report No. 17.00805-7u.
- Sealing test, Sika Boom®-405 Water Stop, Ofi, Report No. 17.00805-1u.
- Thermal conductivity, water vapour diffusion, water absorption, Sika Boom®-405 Water Stop, Ofi, Report No. 1700805-2.

PRODUCT INFORMATION

Chemical Base	2-part polyurethane foam	
Packaging	**Container specification**	**Box content**
	320ml, canister with lever and 2 nozzles each	15 canister per box
	Refer to the current price list for available packaging variations.	
Colour	Green	
Shelf Life	9 months from date of production	

Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +25 °C. Store in an upright position. Protect the canister from direct sunlight and temperatures above +50 °C (danger of exploding). Always refer to the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.		
Density	Cured product	39 kg/m³	(FEICA TM 1019)

TECHNICAL INFORMATION

Reaction to Fire	Class B2		(DIN 4102-1)
UV Exposure	Not permanently UV-stable		
Diffusion Resistance to Water Vapour	μ = 37		(EN 12086)
Equivalent Air Layer Thickness for Water Vapour	S_d = 1.8 m		(EN 12086)
Service Temperature	Maximum	+80 °C (briefly up to +100 °C)	
	Minimum	-40 °C	
Expansion	40 %		(FEICA TM 1010)

APPLICATION INFORMATION

Yield	Foam (box) yield, 320 ml canister	8 L	
	Joint yield, 320 ml canister	~8 m	
Product Temperature	Optimum	+18 °C min. / +25 °C max.	
Ambient Air Temperature	Maximum	+ 30 °C	
	Minimum	+ 5 °C	
	Optimum	+ 20 °C	
Substrate Temperature	Maximum	+35 °C	
	Minimum	+5 °C	
	Optimum	+20 °C	
Cutting Time	~5 min (time after which a 30 mm bead can be cut)		(FEICA TM 1005)
Tack Free Time	~3 min		(FEICA TM 1014)

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LIMITATIONS

It is the user's responsibility to determine suitability for use. If in doubt, please contact Sika® Technical Services for advice.

- Do not use the product for drinking water application.
- Do not use the product for sealing areas where running water is present.
- Do not use the product for mechanical or structural fixing purposes.
- Do not use the product for vibrating components.
- Product should not be left exposed to UV.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

Regulation (EC) No 1907/2006 (REACH) - Mandatory training
As from 24 August 2023 adequate training is required before industrial or professional use of this product. For more information and a link to the training visit www.sika.com/pu-training.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be clean, sound, firm, free from oils, grease, dust and loose or friable particles. Paint, cement laitance and other poorly adhering contaminants must be removed. The Product adheres without primers or activators to most building materials such as wood, concrete, brick, metal or aluminum. For non-conventional substrates a preliminary adhesion test is recommended.
IMPORTANT
Excess moisture
Do not pre-dampen the substrate and remove excess moisture. Excess moisture on the substrate may lead to adhesion problems and to shrinkage once the foam is cured.
IMPORTANT
Roughening and priming
When used for substrates such as polyethylene (PE), polypropylene (PP) or polyvinylchloride (PVC) the substrate must be roughened with an abrasive paper or abrasive pad and pre-treated using a suitable primer or activator such as Sika® Aktivator-205.
IMPORTANT
Securing moving components
Firmly secure all moving components which are meant to be sealed against possible movement, until the product has fully cured.

MIXING

Neither manual pre-activation nor mixing is required. The mixing process of the two parts contained in the canister takes place automatically in the nozzle. Shake canister well prior to application.

APPLICATION

IMPORTANT
Minimum and maximum width of area to be sealed
The area to be sealed must have a minimum width of 10 mm. The foam is tested to provide a watertight seal for pipes with a diameter of up to 200 mm.
PREPARING THE CANISTER FOR APPLICATION
1. Shake the canister well for a minimum 20 times before use. Note: Repeat shaking after periods of non-use.
2. Remove the cap from the canister.
3. Insert the nozzle into the valve so that the extension tube of the nozzle points in the direction of the arrow.
4. Fold the application lever over the nozzle head.
5. IMPORTANT: Non-uniform colour of the foam indicates incorrect mixing of the two parts in the nozzle. Dispense a small amount to check the colour.
6. If the colour is not uniform, remove the nozzle and shake the canister again 20 times.
7. Mount another nozzle, dispense a small amount of foam and check the colour.

If the colour is uniform, you can proceed with the application. If not, repeat the two previous steps.
APPLYING THE PRODUCT
IMPORTANT
Application in pipes containing cables
When applying the product in a pipe containing cables, the cables must be separated from each other so that the foam can be applied between of all cables.
1. IMPORTANT: The valve system is an on/off valve. Dosing is not possible, otherwise mixing errors may occur. Always press the application lever firmly and all the way. Apply the product by pressing down firmly on the application lever. Fill voids and cavities only partially, as the foam expands during curing.

Interrupting the application
Note: The application can be suspended at any time. Replace the nozzle before resuming the application. Once the can has been opened, use within 2 weeks.

CLEANING OF TOOLS

Clean all tools and application equipment with Dual Purpose Foam Cleaner immediately after use. Hardened material can only be mechanically removed.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must

be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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