

PRODUCT DATA SHEET

SikaSeal®-176

Acrylic sealant for connection and movement joints

PRODUCT DESCRIPTION

SikaSeal®-176 is a water-based acrylic sealant. It is used for sealing joints with moderate movement and for filling cracks in masonry.

USES

The Product is used for sealing the following types of joints:

- Connection joints
- Expansion joints

The Product is used for the following areas:

- Window frames, door frames, and windowsills
- Joints between walls and ceiling
- Holes and cracks in walls

The Product is used on many construction materials and substrates such as:

- Concrete
- Bricks
- Plastered surfaces
- Plasterboards
- Aluminium
- Wood

For information about unsuitable substrates or substrates of limited suitability, refer to section Substrate quality.

The Product is used for interior and exterior applications.

CHARACTERISTICS / ADVANTAGES

- Can be painted with most waterborne paints
- Very good resistance to UV exposure
- Good adhesion to many construction materials
- Easy to apply, tool and clean
- Low stress on substrate due to plastic behaviour of the sealant
- Very low VOC emissions
- Free of solvents and phthalates (acc. TRGS 610)
- Transportable at -10 °C (max. 24 hours)

ENVIRONMENTAL INFORMATION

- VOC emission classification GEV Emission EC1^{plus}

APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 15651-1:2012 Sealants for non-structural use in joints in buildings and pedestrian walkways — Part 1: Sealants for facade elements

PRODUCT INFORMATION

Product Declaration	EN 15651-1:2012	F EXT-INT 12.5P
Chemical Base	Acrylic dispersion	
Packaging	300 ml cartridges Refer to the current price list for available packaging variations.	
Shelf Life	24 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. Always refer to packaging. The Product can be exposed once to a temperature of -10 °C for a maximum period of 24 hours. Before use test the Product to confirm suitability. Refer to the current Safety Data Sheet for information on safe handling and storage.	
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Colour	Available in a range of colours, refer to the price list for further information.	
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Density	1.55 kg/l	(ISO 1183-1)
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TECHNICAL INFORMATION

Shore A Hardness	12 (after 28 days)	(ISO 868)
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Movement Capability	± 12.5 %	(ISO 9046)
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Service Temperature	Maximum	+70 °C
	Minimum	-25 °C

APPLICATION INFORMATION

Sag Flow	20 mm profile at +23 °C	< 1 mm	(ISO 7390)
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Product Temperature	Maximum	+35 °C
	Minimum	+5 °C

Ambient Air Temperature	Maximum	+35 °C
	Minimum	+5 °C

Substrate Temperature	Maximum	+35 °C
	Minimum	+5 °C

Beware of condensation. Substrate temperature during application must be at least +3 °C above dew point.

Curing Rate	+23 °C at 50 % r.h.	1 mm per 24 hours	(CQP049-2)
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Skin Time	+23 °C at 50 % r.h.	15 minutes	(CQP019-1)
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VALUE BASE

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

FURTHER DOCUMENTS

Pretreatment Chart Constructive Sealants and Adhesives

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling.

Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation

for more information.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

The Product must not be used on the following substrates:

- Bitumen, natural rubber or EPDM
- XPS and EPS insulation boards
- Corrosion sensitive metals such as iron and steel

On the following substrates, the Product may exhibit poor adhesion:

- Polyethylene (PE)
- Polypropylene (PP)
- PTFE (Teflon®)

Perform a preliminary adhesion test on the above substrates before full application.

Contact Sika Technical Services for additional information.

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SUBSTRATE PREPARATION

Substrate testing

Note: Adhesion tests on project specific substrates must be performed and procedures agreed with all parties before full project application. For more detailed advice and instructions contact Sika Technical Services.

The substrate must be sound, clean, dry and free of contaminants such as dirt, oil, grease, cement laitance, sealant residues and poorly bonded coatings which could affect adhesion of the primer and sealant.

The substrate must be of sufficient strength to cope with the stresses induced by the sealant during movement.

1. Use techniques such as wire brushing, grinding, grit blasting or other suitable mechanical tools to remove all weak substrate material.
2. Repair all damaged joint edges with suitable Sika repair products.
3. Remove all dust, loose and friable material from all surfaces before application of the sealant.

If tested or supported by experience, the Product can be used without primers or activators on many substrates.

Porous substrates, such as concrete, plaster, renders or wood

1. Dilute the Product in water at a ratio of between 1 : 1 and 1 : 5.
2. Apply the primer solution by brush.

For more details of the primer or pre-treatment products refer to the individual Product Data Sheet. Contact Sika Technical Services for additional information.

APPLICATION

IMPORTANT

Strictly follow installation procedures

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

IMPORTANT

Environmental conditions during application and cure

Changes in the environmental conditions can affect product performance. Skin formation and drying time can be significantly delayed by high humidity, low temperature and large joint dimensions.

- Protect the Product from leaching, do not expose to water until a solid skin has formed
1. Apply masking tape where neat or exact joint lines are required.
 2. Open the seal on the top of the cartridge, or open the end of the foil pack. Fit the nozzle and cut it to

the desired size. Insert the product into the caulking gun.

3. Apply the Product into the joint ensuring that it comes into full contact with the sides of the joint and avoiding any air entrapment.
4. **IMPORTANT** Do not use tooling products containing solvents. As soon as possible after application, tool the sealant firmly against the joint sides to ensure adequate adhesion and a smooth finish. Use a compatible tooling agent such as clean water to smooth the joint surface.
5. Remove the tape within the skinning time of the Product after finishing.

OVER-PAINTING THE SEALANT

IMPORTANT

Tacky paint over the sealant

Some paint systems may exhibit plasticiser migration that will cause the painted surface to be tacky.

- Trial the paint system with the Product prior to undertaking the project.

The Product can be over-painted with most conventional paint coating systems. Prior to application test the paint system for compatibility.

1. Allow the Product to fully cure before over-painting.
2. Carry out preliminary trials to test the paint for compatibility in accordance with ISO/TR 20436:2017 - Buildings and civil engineering works — Sealants — Paintability and paint compatibility of sealants

The use of non-flexible paint systems may lead to cracking of the paint coating depending on the movement of the joint.

Colour variation

Note: Colour variations may occur due to the exposure in service to chemicals, high temperatures or UV-radiation, especially with white colour shade. This effect is aesthetic and does not adversely influence the technical performance or durability of the product.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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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Product Data Sheet

SikaSeal®-176

February 2024, Version 01.01
02051404000000130

SikaSeal-176-en-IE-(02-2024)-1-1.pdf

