BUILDING TRUST

PRODUCT DATA SHEET

# Sikasil®-703

WEATHER SEALANT FOR GLASS AND METAL

## DESCRIPTION

Sikasil®-703 is a 1- component, moisture-curing, high modulus elastic joint sealant.

## USES

Sikasil®-703 is designed for connection and movement joints between windows and/or doors and building parts.

## CHARACTERISTICS / ADVANTAGES

- Non-sag
- Very good primerless adhesion to mostly common building materials including porous and non-porous substrates
- Non-corrosive to metals
- Suitable for alkaline substrate, e.g. concrete, mortar, fibrous cement
- Solvent-free and very low shrinkage
- Movement capability of ±50 % (ASTM C719)
- Fast chemistry cross-linking
- Excellent weatherability
- Low extrusion force

## APPROVALS / STANDARDS

- ASTM C920 Class 50

## PRODUCT INFORMATION

| | |
|---|---|
| **Chemical Base** | Neutral cure silicone |
| **Packaging** | 300 ml cartridge, 25 cartridges per box |
| **Shelf Life** | 12 months from date of production if stored in undamaged original sealed containers |
| **Storage Conditions** | In dry conditions and protected from direct sunlight at temperatures between +10 °C and +25 °C. |
| **Colour** | White, Bronze, Black, Dark Gray, Light Gray, Rock Gray, Beige |
| **Density** | ~1.40 g/cm³ |

## TECHNICAL INFORMATION

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|---|---|---|
| **Shore A Hardness** | ~25 | (ISO 868) |
| **Tensile Strength** | ~1.54 N/mm² | (DIN 53504) |
| **Modulus of Elasticity in Tension** | ~0.42 N/mm² at 100 % elongation | (DIN 53504) |

| | | |
|---|---|---|
| **Elongation at Break** | ~750 % | (DIN 53504) |
| **Movement Capability** | ±50 % | (ASTM C719) |
| **Service Temperature** | -40 °C to +150 °C | |

**Joint Design**

The joint width must be designed to suit the joint movement required and the movement capability of the sealant. The joint width shall be ≥ 6 mm and ≤ 45 mm. The joint depth shall be ≥ 6 mm and ≤ 15 mm. A width to depth ratio of 2 : 1 must be maintained (for exceptions, see table below).

**Typical joint dimensions**

| Joint Width [mm] | Joint Depth [mm] |
|---|---|
| 10 | 6 |
| 15 | 8 |
| 20 | 10 |
| 30 | 15 |
| 45 | 15 |

All joint must be correctly designed and dimensioned in accordance with the relevant standards, before their construction. The basis for calculation of the necessary joint widths are the type of structure and its dimensions, the technical values of the adjacent building materials and the joints sealing material, as well as the specific exposure of the building and the joints. For larger joints please contact Sika technical service.

| | |
|---|---|
| **Extrusion rate** | ~350 g/min by 6 bar |

## APPLICATION INFORMATION

**Consumption**

| Joint length [m] per 300 ml cartridge pack | Joint width [mm] | Joint depth [mm] |
|---|---|---|
| 5 | 10 | 6 |
| 2.5 | 15 | 8 |
| 1.5 | 20 | 10 |
| 1 | 25 | 12 |
| 0.6 | 30 | 15 |

| | | |
|---|---|---|
| **Sag Flow** | Non-sag | (ISO 7390) |
| **Ambient Air Temperature** | +5 °C to +40 °C, min. +3 °C above dew point temperature | |
| **Substrate Temperature** | +5 °C to +40 °C | |
| **Curing Time** | ~2 mm / 24 hours (23 °C / 50 % r.h.) | |
| **Skin Time** | ~20 minutes at 23 °C / 50 % r.h. | |

## BASIS OF PRODUCT DATA

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

- Sikasil®-703 cannot be used for insulating glass applications and structural glazing bonding
- Sikasil®-703 cannot be overpainted
- Colour variations may occur due to exposure to chemicals, high temperatures and/or UV-radiation (especially with the colour white). However, a change in colour is purely of aesthetic nature, and does not adversely influence the technical performance or durability of the product.
- Do not use Sikasil®-703 on natural stone.
- Do not use Sikasil®-703 on bituminous substrates natural rubber, EPDM rubber or on any building materials which might bleed oils, plasticizers or solvents that could attack the sealant.

- Do not use Sikasil®-703 on pre-stressed polyacrylate and polycarbonate as it may cause environmental stress cracking(crazing).
- Do not use Sikasil®-703 to seal joints in and around swimming pools.
- Do not use Sikasil®-703 for joints under water pressure or for permanent water immersion.
- The use of tooling agents should be avoided if possible. Otherwise, water or a diluted solution of a little neutral soap or alcohol in water should be sparingly applied.

## ECOLOGY

For information and advice on the safe handling, storage and disposal of chemical products, users shallreferto the most recent Safety Data Sheet (SDS) con-tainingphysical, ecological, toxicological and othersafety-re-lated data.

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

Clean and dry, homogeneous, free from oils and grease, dust and loose or friable particles. Cement laitance must be removed. Adhesion tests on project specific substrates must be performed prior to applications. For more detailed advice and instructions please contact Sika technical service. Note: Primers are adhesion promoters. They are neither a substitute for the correct cleaning of a surface, nor do they improve the strength of the surface significantly.

### APPLICATION METHOD / TOOLS

Sikasil®-703 is supplied ready to use.
After the necessary substrate preparation, insert a suitable backing rod to the required depth and apply pre-treatment if necessary. Insert a foil pack or cartridge into the sealant gun and extrude Sikasil®-703 into the joint making sure that it comes into full contact with the sides of the joint and avoids any air entrapment. Sikasil®-703 sealant must be firmly tooled against the joint sides to ensure adequate adhesion. It is recommended to use masking tape where exact joint lines or neat lines are required. Remove the tape within the skin time.

### CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Remover-208 / Sika® Top Clean-T immediately after use. Hardened/cured material can only be mechanically removed.

## LOCAL RESTRICTIONS

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

## 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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