

## PRODUCT DATA SHEET

# SikaInject<sup>®</sup>-301 DE

4-component meth-/acrylate based injection resin with high compressive strength

## DESCRIPTION

4-component meth-/acrylate based injection resin with extreme low viscosity. Hardens to form a product with high compressive strength.

## USES

SikaInject<sup>®</sup>-301 DE may only be used by experienced professionals.

- soil and rock stabilisation
- consolidation of water-saturated sand
- masonry injection

## CHARACTERISTICS / ADVANTAGES

High-quality material base  
Good chemical resistance in hardened condition to many acids, alkalis, solvents, adhesives etc  
Adjustable potlife (see table)

## PRODUCT INFORMATION

|                           |   |
|---------------------------|---|
| <b>Packaging</b>          | part A1: 20 kg<br>part A2: 5 kg<br>part B1: 20 kg<br>part B2: 0.4 kg<br>Larger packaging on request.                |
| <b>Colour</b>             | part A1: transparent, liquid<br>part A2: colorless, liquid<br>part B1: transparent, liquid<br>part B2: white, solid |
| <b>Shelf Life</b>         | 12 months in original packaging when stored correctly   |
| <b>Storage Conditions</b> | store in dry conditions between 15-25°C, protected from heat, frost and direct sunlight                             |
| <b>Density</b>            | part A1: ~ 1.07 kg/L (DIN EN ISO 3675)<br>part A2: ~ 1.12 kg/L (DIN EN ISO 3675)                                    |

part B1: ~ 1.04 kg/L (DIN EN ISO 3675)  
part B2: ~ 2.59 kg/L

|                             |   |
|-----------------------------|---|
| <b>Viscosity</b>            | part A1: ~13 mPas (DIN EN ISO 2555)<br>part A2: ~280 mPas (DIN EN ISO 2555)<br>part B1: ~10 mPas (DIN EN ISO 2555)<br>mixture: ~ 12 mPas (DIN EN ISO 2555)  |
| <b>Consistency</b>          | hard-elastic after curing   |
| <b>Compressive Strength</b> | dried samples (DIN EN 12190)<br>pure product: ~ 15.0 N/mm <sup>2</sup><br>with silica sand 0.1 - 0.3 mm: ~17.6 N/mm <sup>2</sup><br>with silica sand 0.7 - 1.2 mm: ~20.0 N/mm <sup>2</sup><br><br>sample stored in water (DIN EN 12190)<br>with silica sand 0.1 - 0.3 mm approx. 5.0 N/mm <sup>2</sup><br>The compressive strengths to be obtained depends on soil characteristics (composition, void content, water content etc.).<br>Detecting the consolidation on-site by means of test injection is recommended. |

## APPLICATION INFORMATION

| <b>Mixing Ratio</b>          | component A : component B = 1:1 parts by volume   |                    |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
|------------------------------|---|--------------------|--|--|---------|--------------|--------------|------|---------|---------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------------------------|--|--|
| <b>Substrate Temperature</b> | 5 °C - 40 °C  |                    |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| <b>Pot Life</b>              | Potlife can be adjusted by varying quantity of part A2<br><table border="1"><thead><tr><th colspan="3">SikaInject®-301 DE</th></tr><tr><th>part A2</th><th>Potlife 10°C</th><th>Potlife 20°C</th></tr><tr><th>(kg)</th><th>(min:s)</th><th>(min:s)</th></tr></thead><tbody><tr><td>0.15</td><td>19:00</td><td>13:00</td></tr><tr><td>0.20</td><td>16:00</td><td>10:00</td></tr><tr><td>0.25</td><td>12:00</td><td>08:30</td></tr><tr><td>0.50</td><td>06:30</td><td>04:00</td></tr><tr><td>1.00</td><td>03:20</td><td>02:00</td></tr><tr><td>1.50</td><td>02:10</td><td>01:20</td></tr><tr><td>2.00</td><td>01:55</td><td>01:10</td></tr><tr><td>2.50</td><td>01:50</td><td>01:00</td></tr><tr><td>5.00</td><td>01:00</td><td>00:40</td></tr><tr><td colspan="3">mixed into 20 kg part A1</td></tr></tbody></table> | SikaInject®-301 DE |  |  | part A2 | Potlife 10°C | Potlife 20°C | (kg) | (min:s) | (min:s) | 0.15 | 19:00 | 13:00 | 0.20 | 16:00 | 10:00 | 0.25 | 12:00 | 08:30 | 0.50 | 06:30 | 04:00 | 1.00 | 03:20 | 02:00 | 1.50 | 02:10 | 01:20 | 2.00 | 01:55 | 01:10 | 2.50 | 01:50 | 01:00 | 5.00 | 01:00 | 00:40 | mixed into 20 kg part A1 |  |  |
| SikaInject®-301 DE           |   |                    |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| part A2                      | Potlife 10°C  | Potlife 20°C       |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| (kg)                         | (min:s)   | (min:s)            |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 0.15                         | 19:00   | 13:00              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 0.20                         | 16:00   | 10:00              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 0.25                         | 12:00   | 08:30              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 0.50                         | 06:30   | 04:00              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 1.00                         | 03:20   | 02:00              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 1.50                         | 02:10   | 01:20              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 2.00                         | 01:55   | 01:10              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 2.50                         | 01:50   | 01:00              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| 5.00                         | 01:00   | 00:40              |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| mixed into 20 kg part A1     |   |                    |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |
| <b>Curing Time</b>           | ~10 min - 30 min  |                    |  |  |         |              |              |      |         |         |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |                          |  |  |

## 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.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheets (SDS) containing physical, ecological, toxicological and other

safety-related data.

## APPLICATION INSTRUCTIONS

### MIXING

20 kg of part A1 mixed homogenously with 0.15 - 5.0 kg of part A2 (standard mixture with 2.5 kg of part A2).  
mixing time: 3 min  
part A1 + part A2 = component A  
The activated, ready-for-use component A remains stable for approx. 24 hours.

20 kg of part B1 are mixed homogenously with a solution consisting of 0.4 kg of part B2 in 1.7 l of water.  
mixing time: 3 min

part B1 + (part B2 + water) = component B

The activated component B remains stable for approx. 5 hours.

The activated components A and B are then applied in a mixing ratio of 1 : 1 parts by volume with suitable 2-C-injection pumps.

In case of using lower quantities of part A2 as given in standard mixture the "missing volume" in component A has to be replaced by water.

When using higher quantities of part A2 as given in standard mixture the corresponding water-quantity has to be added to component B.

In order to achieve the same volume in the activated components A and B.

## APPLICATION METHOD / TOOLS

Reference must be made to further documentation where applicable, such as relevant method statement, application manual and installation or working instructions.

## CLEANING OF TOOLS

Pump cleaning from liquid material with water only.  
Cured material can only be removed mechanically.

## 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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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### Product Data Sheet

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