

PRODUCT DATA SHEET

Sika® Injection-306

POLYACRYLIC ELASTIC INJECTION RESIN FOR PERMANENT WATERTIGHT SEALING

PRODUCT DESCRIPTION

Sika® Injection-306 is a very low viscous, elastic polyacrylic injection resin with a versatile and adjustable reaction time which can be used in ground water protection zones.

USES

Sika® Injection-306 may only be used by experienced professionals.

- Crack and joint injection
- Injection of SikaFuko® injection hoses to seal construction joints
- Sealing water-bearing cracks and voids
- Sealing all types of leaking building components in damp or water saturated ground conditions
- Sealing leaks where there is some minor movement
- Sealing drainage pipe joints, that are, or will be, covered with damp or water saturated soil
- Injection repair of damaged waterproofing membranes (single and double layer systems)

CHARACTERISTICS / ADVANTAGES

- Provides a passivating environment for embedded steel reinforcement
- Adjustable curing time between 10 and 60 minutes
- Permanently elastic, can absorb limited movement
- Capable of reversibly absorbing (swelling) and releasing (shrinking) moisture
- Very low viscosity comparable to water
- Cured Sika® Injection-306 is insoluble in water and hydrocarbons and resistant to alkalis

APPROVALS / STANDARDS

- Function test with SikaFuko® VT 1, Wissbau, Report No.2002-094-(1A)
- Function test with SikaFuko® Eco 1, Wissbau, Report No.2002-094-(2A)
- Mechanical and long time stability test, FH Aachen

- Compatibility Test with Sikaplan WP/WT Membranes, MPA, Report No.1200/550/15b
- Reaction to fire, EN 13501-1, MPA, Report No.K-3159/085/13-MPA BS

PRODUCT INFORMATION

| | | | |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------|
| Chemical Base | 3-part polyacrylic resin | | |
| Packaging | Ready to use kit: | | |
| | Part A (Resin) | 2 × 8,0 kg | |
| | Accelerator | 1 × 1,0 kg | |
| | Hardener | 4 × 40 g | |
| | Measuring cup | 1 piece | |
| | Additional Accelerator 14 x 1 kg - used for faster reaction times. Refer to current price list for packaging variations. | | |
| Colour | Part A (Resin) | blue – transparent liquid | |
| | Accelerator | yellow – transparent liquid | |
| | Hardener | white - powder | |
| Shelf Life | 12 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 +10 °C and +30 °C. Always refer to packaging. | | |
| Density | Part A (Resin) | ~1,07 g/cm ³ | (EN ISO 2811-2) |
| | Accelerator | ~1,08 g/cm ³ | (at +20 °C) |
| | Hardener | ~1,25 g/cm ³ | |
| Viscosity | ~3 - 11 mPa·s (mixture, at +20 °C) | | (acc. ISO 3219) |
| Reaction to Fire | Class E | | |

APPLICATION INFORMATION

Mixing Ratio

Table 1

Accelerator Metering Chart

| Reaction time | Ambient Temperature and Accelerator quantity (ml) | | | | |
|---------------|---------------------------------------------------|--------------------|--------------------|--------------------|---------------------|
| | +5 °C (+41 °F) | +15 °C (+59 °F) | +22 °C (+72 °F) | +30 °C (+86 °F) | +40 °C (+104 °F) |
| 10 min | | 1350* | 680* | 310 | 160 |
| 20 min | 1300 * | 340* | 230 | 130 | 50 |
| 30 min | 840* | 230 | 140 | 70 | 30 |
| 40 min | 640* | 160 | 90 | 50 | - |
| 50 min | 490 | 90 | 60 | 40 | - |
| 60 min | 370 | 60 | 30 | 30 | - |

The quantity in Table 1 of accelerator (A1) per 8,0 kg of resin (A), will yield ~20 litres of mixed resin. The total accelerator solution must always be 2000 ml (refer to example below).

*Fast reaction – additional accelerator necessary.

Example:

Ambient temperature: +15 °C (+59 °F)

Required reaction time: 30 min

Accelerator = 230 ml

Water = 1770 ml

Total volume = 2000 ml

Note:

1) When using one component pumps: Workability time (pot life) = Factor 0.8 x Reaction time (refer to metering chart)

2) The given data are laboratory parameters and may deviate depending on the situation and conditions on site.

| | |
|--------------------------------|-------------------------|
| Yield | ~ 40 litres per kit |
| Ambient Air Temperature | +5 °C min. / +40 °C max |

Substrate Temperature +5 °C min. / +40 °C max.

Gel time 10 - 60 minutes

APPLICATION INSTRUCTIONS

MIXING

Mixing Sequence

1. Hardener solution

Pour 10 litres of water in a clean container. Dissolve the content of 2 bags (total 80 g) of hardener powder in the water. Stir with a mixer at low speed the hardener solution thoroughly until Part B is completely dissolved.

2. Accelerator solution

Determine the required quantity of accelerator from the accelerator metering chart (Table 1). Dilute the selected quantity of accelerator with water to a total quantity of 2 litres accelerator solution.

3. Accelerator solution with Part A resin

Pour the 2 litres of accelerator solution into 1 x 8.0 kg container of Part A and shake/mix thoroughly.

4. Resin solution with hardener solution

Depending on the type of injection pump used activate the injection resin using one of the methods below:

- One component pump: Pour a partial amount of the final pre-mixed solution in the ratio of 1:1 by volume into a clean mixing container. Mix thoroughly and pour into the storage container of the pump.
- Two component pump: Pour the resin solution into the storage container of the pumps 'A' side. Pour the Hardener Solution into the storage container of the pumps 'B' side. Then pump at a ratio of 1:1 by volume.

APPLICATION METHOD / TOOLS

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

Sika® Injection-306 can be used with standard one or two component injection pumps. Stainless steel injection pumps are recommended.

CLEANING OF TOOLS

Clean all tools and application equipment according to the Product Data Sheet for the Sika® Injection Cleaning System.

FURTHER DOCUMENTS

Clean all tools and application equipment in accordance with the Product Data Sheet for the 'Sika® Injection Cleaning System'.

LIMITATIONS

- The conditions and location of the application must be inspected and surveyed, including any foundations and ground conditions, before making any new watertight sealing surfaces (curtain injection) in close proximity to buildings or within existing structures. It

must also be ensured that there are no drainage systems or open pipes close to the injection areas.

- Protect Sika® Injection-306 Part A from UV, mix the Sika® Injection-306 accelerator solution into the UV-protected bucket of Sika® Injection-306 Part A.
- Reaction time of the final mixed material on site must be checked prior to any injection.
- Contact Sika technical services for specific information on resistance to hydrocarbons or chemicals.

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.

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.

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 Sheet (SDS) containing physical, ecological, toxicological and other safety-related 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.

SIKA LIMITED

Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited

SIKA IRELAND LIMITED

Ballymun Industrial Estate
Ballymun
Dublin 11, Ireland
Tel: +353 1 862 0709
Web: www.sika.ie
Twitter: @SikaIreland



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