

WILLSTOP® 1 + WILLADD® 1

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Fast reacting one-component injection resin
1. Uses

WILLSTOP® 1 is a high-efficient one-component system for sealing water leakages with high water flows. The product can be used to fill cavities in rock cracks, for soil stabilization and anchoring in gravel. The reaction times can be adjusted with a concerted amount of WILLADD® 1.

2. Material Data*

| | | WILLSTOP® 1 | | | | WILLADD® 1 | |
|-----------|-------|-------------|-------------|--------------|--------------|-------------|--------------|
| | | 10°C | 15°C | 20°C | 25°C | 20°C | 25°C |
| Colour | | brown | | | | yellowish | |
| Density | kg/m³ | - | - | approx. 1108 | approx. 1105 | approx. 999 | approx. 1001 |
| Viscosity | mPa*s | approx. 435 | approx. 300 | approx. 180 | approx. 135 | approx. 28 | approx. 25 |

3. Reaction data*

| Percentage by weight WILLADD® 1 | 2% | 6% | 10% |
|--------------------------------------|-------------|-------------|------------|
| at 10°C | | | |
| Start of reaction [seconds] | - | approx. 19 | approx. 12 |
| End of reaction [seconds] | - | approx. 105 | approx. 77 |
| at 15°C | | | |
| Start of reaction [seconds] | - | approx. 16 | approx. 11 |
| End of reaction [seconds] | - | approx. 102 | approx. 61 |
| at 20°C | | | |
| Start of reaction [seconds] | approx. 48 | approx. 14 | approx. 10 |
| End of reaction [seconds] | approx. 360 | approx. 95 | approx. 55 |
| at 25°C | | | |
| Start of reaction [seconds] | approx. 35 | approx. 10 | approx. 8 |
| End of reaction [seconds] | approx. 300 | approx. 80 | approx. 46 |
| Foaming factor (free rise) | - | - | approx. 70 |
| Reactions temperature (maximum) [°C] | - | - | 83 |

Technical Data Sheet

4. Composition and Properties

WILLSTOP® 1 consists of a modified isocyanate.

WILLADD® 1 is a mixture of catalysts and additives.

5. Preparing/Processing

Stir **WILLADD® 1** in an appropriate amount into **WILLSTOP® 1**. This mixture must be protected from air humidity. The mixture has to be injected via packers and pumps into the water-bearing zones and reacts only in contact with water. If not sufficient water is available for the reaction, it can also be injected (ideally 10 parts resin: 1 part water).

6. Storage

At room temperature, the shelf life is at least 12 months in original containers. When using longer stored products, is generally recommended that F. Willich GmbH + Co. KG checked this product before using, whether the product specification is still given. The local legislation on storage has to be observed (see safety data sheet).

7. Delivery form

| WILLSTOP® 1 | WILLADD® 1 |
|----------------------|--------------------|
| 20 l tin can à 20 kg | 5 l tin can à 5 kg |

Other delivery forms on request.

***The indicated data are laboratory values.**

The information in this data sheet corresponds to our knowledge and experiences at the present time. The information does not constitute legally binding assurance of properties. Before you use the product, check this on its suitability. Since the processing are beyond our control, it is subject solely to user.