

# Winter Silicate Resin

# Pipe Doctor Patch Repair

**S1E Winter resin (component B) + water glass (component A).** 

2 component silicate resin system for sewer renovation. S1E Winter (3P-W1 Express) resin (component B) + water glass (component A).

Item number 40.701.F

**Form of delivery** Component A: approx. 15.5 kg (canister)

approx. 280 kg (drum)

Component B: approx. 25.0 kg (canister)

approx. 250 kg (drum)

**Processing time** approx. 13.5 +/- 1.5 minutes at 25°C

approx. 14.5 +/- 1.5 minutes at 20°C

approx. 20.0 minutes at 15°C

Hardening times Attention: Depending on the quantity to be mixed

approx. 130 minutes at 10 °C approx. 115 minutes at 15 °C approx. 105 minutes at 20 °C

**Mixing ratio** 1:1,6 (weight)

[A]:[B] 1:2 (volume); [A] = 0,33 Ltr. [B] = 0,66 Ltr.

Attention: It is mandatory to observe the mixing ratio

**Density** Component [A]: 1,550 kg/l (20°C) water glass

Component [B]: 1,242 kg/l (20°C) silicate resin (type W)

Comp. A + B:  $1,345 \text{ kg/l} (20^{\circ}\text{C})$ 

**Viscosity** Comp. A + B: 1110 mPas (according to DIN 53013 at 20°C)

Comp. [A]: 600 mPas (according to DIN 53013 at 20°C) Comp. [B]: 300 mPas (according to DIN 53013 at 20°C)

**Colour** light beige (resin system after hardening)

## **Product Datasheet**



#### **Mixing**

Prior to mixing the two components, they must be homogenised by shaking them briefly. The two components must be harmonised in terms of quantity and carefully homogeneously mixed with each other for at least 1 minute by using slowly running mechanical stirrers. In order to obtain individual processing and hardening times, Fluvius silicate resins (comp. B) can be intermixed.

#### **Attention**

In case of manual mixing, not more than 15 litres should be mixed. Do not overdose or underdose the hardening agent! Do not mix in any air. There must not be any brown traces of resin in the mixed resin compound. If there are any traces of resin (comp. B) in the resin compound, this may result in the formation of CO<sub>2</sub>. When used with coated carrier materials (e.g. liners), this may cause bubbles in the coating.

#### **Processing**

The recommended resin temperature should range between  $15^{\circ}$ C and  $25^{\circ}$ C. The ideal component temperature is  $20^{\circ}$ C. The fabric fibres to be soaked must be dry, as it is otherwise not possible to soak the fabric fibres. The hardening temperature should not exceed a maximum of  $+90^{\circ}$ C. The minimum hardening temperature should not fall below  $+0^{\circ}$  C. The liner's resistance to heat must be observed. Every time after component B has been withdrawn, the sealing cap and its counterpart must be cleaned using a cleaning cloth or pulp material. The substrate must have an adhesive strength of  $1.5 \text{ N/cm}^2$ . The substrate must be free from grease and dust as well as from anything which prevents adhesion. In order to ensure this, we recommend to lightly sand down the substrate in the initial and/or end zone of the area to be renovated or to apply alternative methods.

Attention: When handling S1E resin components, the manufacturer's warnings must be observed. Hand protection, eye protection, body protection are necessary. The container of component B must be tightly closed after use as the content reacts with the airborne humidity. It is prohibited to fill the resin into wet or moist containers. The resulting carbon dioxide could result in the bursting of these containers!

#### Storage

In tightly closed original containers, the product can be stored for at least 6 months at temperatures between 15°C (unmixed) and 20°C and under dry conditions.

#### **Disposal**

The containers must be emptied completely so that they are free from any content. The containers must be disposed of in according with local regulations.

#### **Notice**

High temperatures shorten and lower temperatures extend all time intervals. The two components are subject to labelling according to the Ordinance on Hazardous Substances. Notices and advice must be observed when processing the products.

#### **Remark**

The information provided in this information sheet is based on our experience and is given to the best of our knowledge, but it is not binding. It must be adapted to the respective intended purposes, building objects and local conditions. Based on this prerequisite, we will be liable for the correctness of the information provided in accordance with our terms and conditions of sale and delivery. Any recommendations deviating from the information provided in our data sheets are only binding for us if they are confirmed in writing.

### **Product Datasheet**



#### **Storage**

It is absolutely necessary to avoid extreme temperatures. Frost has a considerable adverse effect on the PVC coating. The recommended storage temperature is +5 °C and +35 °C. The shelf life at the recommended storage temperature is 1 year. Avoid direct exposure to sunlight and/or UV radiation.

Prolonged exposure to UV light accelerates the ageing process considerably and, as a consequence, reduces the shelf life.

Preferably wrap the product in UV-resistant protective foil and store it in a dark environment. Fastness to light: 7-8 according to ISO 105 B02

#### **Chemical resistance**

In accordance with the information in the resistance list for 3P resin of the types S1, W1, W01, L30E1, L30E3 and L40 at 20°C

#### **Data basis**

All technical data and information in this data sheet are based on laboratory tests and do not represent an assurance of properties of the product described. Actually measured data may deviate in practice due to circumstances beyond our sphere of influence.

#### **Legal notices**

Due to the different materials, substrates and deviating working conditions, neither these notices nor oral consultation can give rise to the warranty of a work result or liability, based on whatever legal relationship, unless we have acted with intent or gross negligence in this respect. The user will then have to prove that they have communicated to S1E in writing in due time and in full any information required for proper and promising assessment by S1E Ltd. The user will have to test the products' suitability for the intended use. Third party's property rights will have to be observed. Apart from that, our respective terms and conditions of sale and delivery will apply.

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## **Product Datasheet**



# S1E Limited Specialist Suppliers of Trenchless Technology

#### **No-dig Pipeline Repair**

S1E Limited is a specialist supplier of trenchless technologies to the drainage repair industry. The company focuses on sourcing quality products for professional use. They are all tried and tested in the field to produce impressive results. S1E distributes high-quality products from market-leading manufacturers for the drainage repair industry. Products include camera inspection systems, cutting and cleaning tools, CIPP lining equipment and consumables, mechanical point repair devices, rat blockers and other site consumables.

S1E Limited is committed to being a quality supplier, with a focus on customer service. S1E is proud to be an active member of the UK Society for Trenchless Technology.

First established in 2007 as Fernco Environmental, the company's mission was to seek out repair products for the infrastructure repair and water management markets. Since 2016, it has re-focused its ranges to the specialist field of trenchless repair, with a growing portfolio in this specialist area.

The company is owned by Cooper Companies Inc, a US-based leader in the production of pipe couplings. The Group also owns companies in Canada, Mexico, Brazil, Germany and France, as well as the UK-based sister company to S1E, Fernco (previously, Flexseal).

It is accredited to ISO 9001: 2015 for its Quality Management System. It is also accredited to ISO 14001: 2015 for its Environmental Management System.



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