

1. Product Profile

StenCare® 2IP-7 two component, solvent-free polyurethane-based injection material. It rapidly hardens in contact with water, creates an impermeable foam and stops leaking. Thanks to its very low viscosity, it can penetrate even the thinnest cracks.

StenCare® 2IP-7 is available in 25 kg plastic drum sets.

2. Uses

StenCare® 2IP-7 is used to provide waterproofing in underground constructions and tunnel applications. The material does not react even after mixing of two components until it comes into contact with water. StenCare® 2IP-7 fills groves and cracks with resin. When contacted by water, it cuts off water flow by creating an impermeable and semi-flexible foam. Allows deeper and farther injections.

3. Application

Prior to application, both components are controlled against frost or any contamination. Products that are frozen or contaminated should not be used. The injection machine works healthily in case both components are homogeneous liquids. Extra care should be taken to make sure that all the equipment is dry.

The reaction time of the mixture can be adjusted by changing the amount of B component in the mixture. Please refer to the mixture table for details. When an entire set is mixed together, the product remains stable for at least 8 hours.

Both A and B components are mixed together until a homogenous mixture is acquired. Then the mixture is injected through a high-pressure injection machine.

If the injection machine contains protective oil and similar liquids on the pump or lines, the material should be pumped until a clear StenCare® 2IP-7 stream is achieved. The application should be started after making sure that the pump and lines are clean.

During the application process, several holes are drilled on the floor. Self-isolated, disposable injection packers are placed in holes. Injection of StenCare® 2IP-7 begins from the bottom packer. When the material comes off from an upper packer, the injection is continued from this packer. When the material comes off from the top packer, the injection is finalised by acknowledging that the cavity is filled with polyurethane material.

Waterproofing Polyurethane Injection Foam

Highlights

- Polyurethane water insulation foam
- Activation with water
- Very low viscosity for the thinnest cracks
- Adjustable reaction times
- Perfect adhesion to concrete
- It doesn't catch fire easily
- Solvent-free, does not contain harmful volatiles to health (VOC=0)
- Safe application with low exotherm

4. Cleaning

The application machine should be carefully cleaned by pumping protective material into the pumps and lines.

5. Safety

Applicators and supervisors must read Material Safety Data Sheet (MSDS) carefully and observe the considerations written therein. Emptied packages must be handled in compliance with relevant regulations and laws.

6. Storage

The material must be kept in dry indoor storage. Recommended storage temperature is 10 – 30°C. Stored in these conditions, the shelf life of unopened containers are 12 months. Low temperatures may lead to crystallization of the product. Do not allow StenCare® 2IP-7 to freeze.

7. Company Liability

The information contained in this document is based on site experience of and laboratory tests done by Stenkim® and meant to give general information. It is the purchaser's responsibility to ensure applicability of products to their use. All Stenkim® products are available

in specified quality and conditions. The company accepts no liability whatsoever unless the transportation, storage, application conditions and customer use are overseen by Stenkim®.

Stenkim® reserves the right to update all information contained in this document without notice.

8. Mixture Table

Typical Reaction Times*	Component A+ %3 Component B	Component A + %5 Component B
Expansion factor	15-25 times	15-25 times
Foaming start	10 seconds	7 seconds
Reaction time	80 seconds	60 seconds

*Reaction times are observed by adding 10% water to the mixture in the laboratory environment.

9. Technical Data

Properties	Results
Chemical Structure	Polyurethane resin and isocyanate
Solid Content	100
Appearance	Amber - Hazy
Density	
Component A	1.21 ± 0.02 kg/l
Component B	1.13 ± 0.02 kg/l
Flow time @ 23°C	2 hours
Viscosity	
Component A	70 ± 14 cP
Component B	84 ± 16 cP
Shelf Life	1 Year

Stenkim® reserves the right to make changes in the values in this table at any time.