

1. Product Profile

StenCare® 2IP-4 1:1 mixing ratio two component, solvent-free polyurethane-based injection material. It rapidly hardens in contact with water, creates an impermeable foam and stops leaking.

StenCare® 2IP-4 is available in 66 kg plastic drum, 460 kg barrel or 2.200 kg IBC sets.

2. Uses

StenCare® 2IP-4 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-4 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

StenCare® 2IP-4 It is injected directly with a high-pressure two component injection pump by mixing it 1:1 mass ratio. Packaging is done according to this ratio.

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.

Two component injection pumps are fed by two components of StenCare® 2IP-4. It should be checked that the right component is fed through the right line.

It is possible to mix both components and use a single component injection pump if there is no two-component pump is available. In this situation 4 hours of pot life must be obeyed and extra care should be taken to make sure that all the equipment is dry.

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-4 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-4 begins from the bottom pacer. When the material comes off from an upper packer, the injection is continued from this

Waterproofing Polyurethane Injection Foam

Highlights

- Polyurethane water insulation foam
- Activation with water
- Low viscosity
- Slow gelling
- 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

packer. When the material comes off from the top packer, the injection is finalised by acknowledging that the cavity is filled with polyurethane material.

Use of injection nozzle and static mixer are recommended especially in low pressure applications.

StenQuick IP can be added to the system if a faster curing is desired. StenQuick IP should be mixed with the component A before application.

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-4 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. Technical Data

Properties	Results
Chemical Structure	Polyurethane resin and isocyanate
Solid Content	100
Appearance	Amber
Density	
Cured Resin	1,11 kg/l
Component A	0,99 kg/l
Component B	1.24 kg/l
Flow time (23°C)	2 hours
Skin over time with ambient moisture– No accelerator	15 minutes
- %5 StenQuick IP	12 minutes
- %10 StenQuick IP	10 minutes
Viscosity	250 cP
Shelf Life	1 Year

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