

FOAM SEAL

Properties:

FOAM SEAL is a two component, quickly reacting, slightly flexible injection foam based on silicate. It is used for filling of cavities in tunneling, mining industry and civil engineering for solidification of rocks as well as for stopping of intruding water.

After the homogeneous mixing of the two components a viscous emulsion arises, this does not absorb any water from its surrounding. On the contrary, due to its high density it has the ability to push the water ahead.

Technical Data:

Substance data of components:

Component A

Consistency	liquid	
Colour	colourless	
Odour	characteristic	
Spec. density (23°C)	approx. 1.3 g/cm ³	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 20 mPas	DIN EN ISO 2555

Component B

Consistency	liquid	
Colour	brown	
Odour	characteristic	
Spec. density (23°C)	approx. 1.23 g/cm ³	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 250 mPas	DIN EN ISO 2555

Mixture of A- and B-component:

Processing temperature	5 - 40°C	substrate temperature
Recommended temperature	15 - 30°C	product temperature
Mixing ratio A : B	1 : 1 (parts by volume)	

Reaction data (at 23°C):

Cream time (start of foaming)	approx. 25 s	ASTM D7487
Free rise time (end of foaming)	approx. 45 s	ASTM D7487
Volumetric expansion factor	approx. 30	ASTM C1643

Processing:

Both components are taken directly from the original packaging by means of a 2K injection pump and mixed homogeneously in a static mixer. Injection is done over packer or injection lances.

Indicated injection pumps: **TPH INJECT PS 25-II**
 TPH INJECT PS 5-II

Due to the open cellular structure and slightly external tendency to sanding of *FOAM SEAL* it does not reach its maximum foaming factor when it is used in closed and limited places like cracks, gaps, joints etc. Thereby it creates strongly solid, compact and resistant foam.

Direct influence of heat on silicate foam, such as welding and burning activities, strongly heated cut-off wheels and chisels, radiant heaters, open light sources etc. must be avoided when using very large volumes of *FOAM SEAL* for void filling.

Safety information:

FOAM SEAL components A and B are classified as hazardous according to Regulation (EC) 1272/2008 (CLP).

It is therefore necessary, before beginning processing, to become familiar with the precautions and safety advice as indicated in the material safety data sheet.

Packaging:

Component A 26 kg metal canister

Component B 24 kg metal canister

Bigger packaging on request.

Storage:

Shelf life at least 12 month in original packaging when stored in dry conditions between 15-25°C, protected from heat, frost and direct sunlight.

After the expiration the use of the product is generally not recommended, unless an approval has been provided by TPH. This approval can only be obtained by the quality assurance department of TPH releasing the material after verification of main properties being within specification.

Disposal:

Small quantities of cured product residues can be disposed of as normal domestic waste. Dispose of not cured product components must be effected in accordance with the corresponding local regulations. For further information please refer to the material safety data sheets.

Test certificates:

Fire behaviour test of building products, Inflammability at directly flames according to DIN EN ISO 11925, part 2: 2002; MFPA Leipzig 2010

Classification report about fire behaviour according to DIN EN 13501-1:2007; MFPA Leipzig 2010

FOAM SEAL - Examination of the leaching behaviour of an injection resin based on silicate (column trial referring to DIBt Guideline "Assessments of the effects of construction products on soil and ground water"; MFPA Leipzig 2011



Legal notice:

The correct and thus successful application of our products is not subject to our control. A guarantee can be issued for the quality of our products within the framework of our sales and supply conditions, however not for successful processing. All data and specifications in this specification sheet are based on the present state of the art and the right to changes and adaptations for the sake of development remains explicitly reserved. The consumption specifications designated by us can be only average empirical values, where deviations are possible on an individual basis and therefore cannot be excluded by us.

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