

TEKNOPOX AQUA FILL 5900 A

Epoxy Stopper

STOPPER TYPE

TEKNOPOX AQUA FILL 5900 A is a two-pack, water-borne epoxy stopper. It is intended for use on concrete, light concrete and cement plaster surfaces, especially on walls and ceilings in nuclear power plants. The grain size of the quartz sand used as extender is maximally 0.1 mm. Thus the stopper can be applied in thin coats when a very smooth surface is required. The stopper is as easy to apply as conventional sand-filled stoppers. For filling cavities or if thicker coats are required, coarse quartz sand should be added to the stopper.

The tensile strength of TEKNOPOX AQUA FILL 5900 A surpasses that of concrete, since the binder is a two-pack epoxy. The stopper is resistant to action by water and chemicals.

SPECIAL PROPERTIES

If a water-borne epoxy paint system is preferred, walls stopped up with TEKNOPOX AQUA FILL 5900 A can be overcoated with TEKNOPOX AQUA PRIMER 5901 A and TEKNOPOX AQUA 5902 A paints. The resultant coating resists radioactive radiation and is easy to decontaminate.

The volatile component in the TEKNOPOX AQUA A products is water. Thus the use of these paints does not involve health hazards or fire risks associated with solvent-borne paints.

APPROVALS

TEKNOPOX AQUA FILL 5900 A fulfils the requirements stated in report STUK-YTO-TR 210 issued by STUK - Radiation and Nuclear Safety Authority, Finland.

The product has CE approval for protection of concrete structures. Additional information: see page 3: "CE MARKING".

TECHNICAL DATA

Mixing ratio Base (Comp. A): 1 part by volume
 Hardener (Comp. B): TEKNOPOX AQUA FILL HARDENER 5900 A 1 part by volume

Pot life, +23 °C 2 h

Solids 76 ±2% by weight

Total mass of solids abt. 1200 g/l

Volatile organic compound (VOC) abt. 10 g/l

Practical spreading rate The values depend on the surface roughness and required filling degree. E.g. for clean cast concrete the spreading rate is: 1.5 - 2.5 m²/l.

Drying time at +23°C / 50% RH
 - dust free (ISO 9117-3:2010) after 1.5 h
 - touch dry (ISO 9117-5:2012) after 2 h
 - fully cured after 5 d

Overcoatable with stopper or paint

surface temperature	by itself, with TEKNOPOX AQUA PRIMER 5901 A or TEKNOPOX AQUA 5902 A	
	min.	max.*
+10°C	after 2 d	after 1 month
+23°C	after 16 h	after 1 month

* Maximum overcoating interval without roughening.

Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.

Thinner Water

Clean up Water and emulsifying washing liquid
 TEKNOSOLV 9506

Colours Light grey

Radiation resistance and decontamination The coating system withstands well radioactive radiation and is easy to decontaminate (statement No. VTT-R-00255-20 by VTT - Technical Research Centre of Finland).

SAFETY MARKINGS See Safety Data Sheet.

DIRECTION FOR USE

Surface preparation

CONCRETE SURFACES: The concrete must be at least 4 weeks old, well-hardened and solid. The water content of the top layer must not exceed 4% by weight.
Smooth down any spatter and irregularities on the surfaces by grinding. Brush away loose cement, sand and dust. Wash oily and greasy surfaces with detergent or solvent. Remove dense laitance if present by etching with RENSA ETCHING etching liquid or by grinding or blast-cleaning.

Application conditions

The temperature of the ambient air, the surface and the stopper shall be above +10°C during the application and drying period and relative air humidity below 80%.

Mixing and application of stopper

Immediately before use mix the hardener into the base in correct proportion. The mixing is best to be done with a slow-rotating drilling machine equipped with a mixer. To make the mixing easier, the base has been coloured white and the hardener dark grey. The ready mixed stopper is of a uniform, light grey colour.

After mixing the stopper is ready for use without dilution. During the application a small amount of water, no more than 3% by volume, can be added to make up for the water evaporated or absorbed into the surface. The ready mixture must be used within 2 h after mixing. Mixtures older than this are unfit for use.

When filling cavities or stopping up rougher areas quartz sand with particle size 0.0 - 0.3 mm is added to the stopper. Big cavities are filled up several times. For surface and fine stopping no sand is to be added. The coat thickness is then 0.1 - 1.0 mm.

Filling cavities: stopper mixture 10 l, quartz sand 5 l
Rough stopping: stopper mixture 10 l, quartz sand 3 l
Fine stopping: stopper mixture 10 l, quartz sand -.

On smooth surfaces, e.g. clean cast concrete, the stopper is applied by steel trowel (width 20 - 35 cm). On uneven surfaces it is better to use a rubber spatula, which can easier follow surface irregularities and does not give too thick coats.

The stopper cannot be smoothed by grinding. Trowel marks on the surface can be removed by pushing with a steel trowel about 4 hours after the application of stopper or by grinding the following day.

Allow the stopper coat to dry before applying the next coat. No grinding of TEKNOPOX AQUA FILL 5900 A surface is needed between coats or before new filling or painting.


ADDITIONAL INFORMATION

The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

MUST NOT FREEZE.

Continues...

CE MARKING

	
0809	
Teknos Oy Takkatie 3, P.O. Box 107 FI-00371 Helsinki, Finland 20 Declaration of Performance No. 0044	
0809-CPR-1063 EN 1504-2:2004 Surface protection products – Coating Physical resistance (5.1) Chemical resistance (6.1)	
Abrasion resistance	Requirement: Weight loss less than 3000 mg
Capillary absorption and permeability to water	Requirement: $w < 0,1 \text{ kg/m}^2 \times \sqrt{h}$
Resistance to severe chemical attack, Class I	Requirement: Reduction in hardness of less than 50 %
Adhesion strength by pull-off test	Requirement: Rigid system without trafficking: $\geq 1,0 (0,7) \text{ N/mm}^2$
Dangerous substances	See safety data sheet

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos data sheets, material safety data sheets and system sheets are on our home pages www.teknos.com.



EN_2413_Tuoteseloste.pdf