DATA SHEET 1199
6 10.11.2015

TEKNOPOX AQUA V FILL A

Epoxy Stopper

STOPPER TYPE

TEKNOPOX AQUA V FILL A is a two-pack, water-borne epoxy stopper. It is intended for use on concrete, light concrete and cement plaster surfaces. 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 V FILL A surpasses that of concrete, since the binder is a two-pack epoxy. TEKNOPOX AQUA V FILL A is resistant to action by water and chemicals and is therefore suitable for use under chemical-resistant epoxy coatings also on submerged structures.

SPECIAL PROPERTIES

If a water-borne paint system is preferred, walls stopped up with TEKNOPOX AQUA V FILL A can be overcoated with TEKNOPOX AQUA V TIX A and TEKNOPOX AQUA V A Epoxy Paints. The resultant coating resists radioactive radiation and is easy to decontaminate.

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

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

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 V FILL A HARDENER	1 part by volume

Pot life, +23 °C

1½ h

Solids

76 ±2% by weight

Total mass of solids

abt. 1300 g/l

Volatile organic compound (VOC)

abt. 20 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 h
- touch dry (DIN 53150:1995)	after 3 h
- fully cured	after 5 d

Overcoatable with stopper or paint

	by itself, TEKNOPOX AQUA V TIX A or TEKNOPOX AQUA V A	
surface temperature	min.	max.*
+10°C	after 2 d	after 9 months
+23°C	after 16 h	after 9 months

* 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 synthetic washing agent
TEKNOSOLV 9506

Colours

Light grey

Radiation resistance and decontamination

The coating system TEKNOPOX AQUA V FILL A, TEKNOPOX AQUA V TIX A and TEKNOPOX AQUA V A withstands well radioactive radiation and is easy to decontaminate (statement No. 1480/28/05/RTE by VTT - Technical Research Centre of Finland).

SAFETY MARKINGS

See Safety Data Sheet.

PTO

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 BETONI-PEITTAUSLIUOS Agent or by grinding or blast-cleaning.

Application conditions

The temperature of the ambient air, the surface and the stopper shall be above +15°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 1½ h after mixing. Mixtures older than this are unfit for use.

When filling cavities or stopping up rougher areas quartz sand with particle size up to 0.3 mm is added to the stopper. Big cavities are filled up several times. For surface 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 is needed between coats or before new filling or painting to ensure adhesion to the TEKNOPOX AQUA V FILL A surface.

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

CE

0809

Teknos Oy
Takkatie 3, P.O. Box 107
FI-00371 Helsinki, Finland
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Declaration of Performance No. 0027

0809-CPR-1063
EN 1504-2:2004
Surface protection products – Coating
Chemical resistance (6.1)

Abrasion resistance	Requirement: Weight loss less than 3000 mg
Capillary absorption and permeability to water	Requirement: $w < 0,1\ kg/m^2 \times \sqrt{h}$
Resistance to severe chemical attack	Requirement: Reduction in hardness of less than 50 %
Adhesion strength by pull-off test	Requirement: Rigid system without trafficking: ≥ 1,0 (0,7) N/mm^2
Dangerous substances	See safety data sheet

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