

TYPE

A/F-liquid epoxy resin; reactive diluted, water-emulsifiable

FORM OF DELIVERY (f.o.d.)

100 %

SPECIAL PROPERTIES AND USE

Non-crystallizing liquid resin, low-viscous. Water reducible primers/coatings on mineral substrates, adhesives and water-washable jointing compounds for tiles, hydraulic epoxy mortars (ECC).

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (500 1/s; 23 °C)	[mPa.s]	700 - 900
---------------------------------------	---------	-----------

Epoxy-Equivalent VLN 305

epoxy equivalent (form of delivery)	[g/mol]	190 - 200
--	---------	-----------

Iodine Colour Number DIN 6162

iodine colour number		<= 5
----------------------	--	------

Not continually determined:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (500 1/s; 25 °C)	[mPa.s]	600 - 750
---------------------------------------	---------	-----------

Density (Liquids) DIN EN ISO 2811-2

density approx. (20 °C)	[g/cm ³]	1,11
-------------------------------	----------------------	------

Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 100
-------------	------	-------

SUGGESTED USES AND PROCESSING

Beckopox EP 122w is a low viscous, water-emulsifiable epoxy resin. In combination with water-thinnable or water-emulsifiable hardeners it is used to formulate coatings for concrete, jointing compounds and tile-adhesives.

The preferred reaction partner for concrete-coatings is Beckopox EH 623w (primers and topcoats can be formulated). For water-washable jointing compounds the best results are obtained with Beckopox EH 661 or EH 663. For coatings, Beckopox EP 122w is mixed 1 : 1 with Beckopox EH 623w or EH 659w in a dissolver, the mixture can be then emulsified with water under continuous stirring to the desired concentration.

These coating materials can be applied by brush, roller or spray gun. After 18 - 24 hours drying the next layer can be applied. Fully curing and mechanical resistance can be achieved within 8 - 10 days. To accelerate drying and the development of hardness, Beckopox EP 122w can be combined with Beckopox EP 384w.

Pigmentation

Pigmentation is carried out normally on a triple roll mill or perl mill. The compatibility of pigments has to be checked in advance. Preferred are inert pigments, like titanium dioxide, chromium oxide or iron oxide.

After homogenous mixing of pigment-millbase and hardener, the formulation can be diluted with water. Processing time depends on the choice of hardener. The end of the processing time is not visible through viscosity increase or gelation.

Jointing compounds

For producing of jointing compounds Beckopox EP 122w is combined with Beckopox EH 661 or EH 663. Extenders are quartz powder or -sand. After application polluted tiles can be washed with water within the processing time of the compound.

MIXING RATIO AND POT LIFE

A blend of

100 g Beckopox EP 122w
100 g Beckopox EH 659w/50WA
100 g deionized water

has a pot life at 23 °C of approx. 3 - 4 hours, which can not be observed through a pronounced increase in viscosity, so that it should be used within this time period. The substrate temperature should not be below 10 °C and the relative humidity not above 80 %.

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 365 days.

DISTINGUISHING FEATURES

Beckopox EP 122w is much lower in viscosity than Beckopox EP 147w, shows slower drying and is easier water-emulsifiable. Beckopox EP 122w is preferably used for mineral substrates.

SAFETY AT WORK AND ENVIRONMENTAL PROTECTION

When handling and processing epoxy resins and hardeners, the rules and regulations established by local authorities should be observed. A Material Safety Data Sheet is available on request.