

Technical Data Sheet



AB-POX® 065 N Plus

2-C-EP-Plus binder / resin

Description:

2-component epoxy resin, low viscosity, colourless, unfilled
VOC < 500 g/l, free of nonylphenol

Characteristics:

- binder / resin for mortars and coatings
- low yellowing
- low viscosity
- high chemical resistance
- high mechanical resistance
- extended open time
- inert and harmless once cured

Application:

AB-POX 065 Plus is the innovative development of AB-POX 065 N and shows an excellent colour consistency, which is not typical for standard epoxy resins. The modified quality formulation offers perfect characteristics for coloured quartz flooring systems. The resin is specifically designed for professional screed applications. The material offers an extended open time. The resin mixes well with a wide range of dry fillers i. e. quartz sand, quartz powder, basaltic grit, hard aggregates, granite, silicon carbide or coloured quartz sand (good grading curve or variation of aggregate size). The material is particularly suitable for use on cementitious indoor areas i. e. industrial production plants, kitchens, food industry, showrooms, sales areas, supermarkets, etc.

The extended open time allows the applicator to achieve a finish on a coloured quartz flooring system after 2 hours at a temperature of 20°C.

Consumption:

depending on use

Resistant to:

- water / sewage
- alkalis
- mineral oil
- wet temperature max. 40°C
- saline solutions
- diluted acids
- lubricants and fuels
- wet temperature short-term max. 60°C

Technical Data:

Mixing ratio A : B	100 : 50 by weight (2 : 1)
Density (23°C)	approx. 1.10 g/cm ³
Volume solids	approx. 100 %
Viscosity (23°C)	approx. 350 mPa·s ± 100
Compressive strength (DIN EN ISO 604)	60 - 100 N/mm ² (depending on filler ratio)
Tensile strength (DIN EN ISO 178)	30 N/mm ²
Water absorption	< 1.5 %
First contact with water	after 24 hours (23°C)

Details for application:

Pot life (12°C / 23°C / 30°C)	approx. 60 minutes / 30 minutes / 15 minutes
Substrate temperature	minimum 12°C up to maximum 30°C
Material temperature	15°C - 25°C
Maximum relative humidity of air	at 12°C: 75 % (dew point +3°C) at > 23°C: 85 % (dew point +3°C)
Duration between applications (if sprinkled with quartz sand, the duration will increase)	12°C: min. 24 hours max. 36 hours 23°C: min. 16 hours max. 24 hours 30°C: min. 16 hours max. 24 hours
Curing time / foot traffic (12°C / 23°C / 30°C)	24 hours / 16 hours / 16 hours
Curing time / mech. resistance (12°C / 23°C / 30°C)	72 hours / 48 hours / 48 hours
Curing time / chem. resistance (12°C / 23°C / 30°C)	7 days / 5 days / 5 days
All above values are approximate and may be used as a guideline for specifications	

Packaging:

25 kg - pails
200 kg - barrel
1000 kg - container

Colour:

clear

Storage:

12 months, unopened in original drums under dry conditions and a temperature of 15 - 25°C.
At temperatures < 10°C crystallisation is possible. Please consult us.

1. Surface preparation

Prior to the application the substrate must be prepared by mechanical means using qualified equipment e.g. Blastrac® shot blasting.

Minimum requirements:

- free of cement laitance, dust, oil, fat and other contaminants
- open textured, absorbent surface
- pull off strength min. 1.5 N/mm²
- concrete residual moisture max. 4 %

Depending on the condition of the substrate the surface must be made non-porous by the application of a primer and / or key coat using **AB-POX 065 N Plus**, followed by a light sprinkle of clean, dry quartz sand.

On concrete surfaces where there is rising damp, residual moisture or damp concrete of maximum 6 %, AB-POX 010 must be used.

Once cured, carefully remove excess sand. See also "general preparation and application instructions" sheet.

2. Application

Prior to mixing, the temperature of the components must be between 15 - 25°C. Mix the components in the correct ratio using a suitable low speed electric mixer (300 - 400 rpm) for at least 3 minutes or until a completely homogeneous mixture has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute more. After mixing, fillers can be added whilst stirring constantly. Distribute the mixture immediately onto the surface. Depending on the condition of the substrate we recommend applying a primer and a key coat or a filled primer. Use a rubber squeegee to spread the primer evenly and finish with a paint-roller. The key coat (1 : 0.8 up to 1 : 1 w/w) and the filled primer (1 : 1 up to 1 : 2.5 w/w) can be formulated using **AB-POX 065 N Plus** and clean, dry, tempered quartz sand. The mixture should be applied by notched trowel or scraper. The applied coating must always be lightly sprinkled with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²). Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

Primer: approx. 0.3 - 0.5 kg/m².

Key coat: 1 : 0.8 up to 1 : 1 filled with clean, dry quartz sand Ø 0.1 - 0.3 mm.

Consumption: approx. 0.75 kg/m² resin plus clean, dry quartz sand.

3. System description

The following figures are for ambient and surface temperatures of 15 - 23°C. Both high and low temperatures will influence the filler ratio and the consumption per m².

AB-POX 065 N Plus can be used in various ways. The most common applications are:

Epoxy screed / mortar:

The use of the product and the expected wear and tear will determine the choice of fillers.

For creating an impervious flooring system which is resistant to high mechanical wear and tear, we recommend the following mix ratio:

1 part by weight AB-POX 065 N Plus and

7 parts by weight Silimix 282

To ensure a professional application and also a homogenous mixture, the mandatory use of an efficient mixer is very important e. g. Zyklos. The easiest method of application is to mix the materials into a foaming mortar. Distribute the mixture with a trowel or screed box, then smooth and compact the surface. Consumption: approx. 0.25 kg/m²/mm resin plus quartz sand. Depending on the use or purpose it is possible to add hard aggregates of various sizes to the mixture. The largest aggregate size should be 1/3 of the coating thickness, employing this method will improve the wear resistance. The surface may be completed in various ways: A simple sealing topcoat of **AB-POX 065 N Plus** with or without the spreading of quartz sand.

Professional maintenance will increase the service life of the flooring system.

N/B:

UV radiation cause discolouration.

4. Chemical resistance

Depending on the requirements we recommend to test the chemical resistance.

5. Packaging

25 kg - sets

16.66 kg component A

8.34 kg component B

6. Health and safety

GISCODE: RE30

Avoid inhalation of the vapours and contact with skin. Wear suitable protective clothing, gloves and eye / face protection. Adequate ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Safety Data Sheet.

7. EU Directive ("Decopaint-RL"):

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category All / j / type SB) is 500 g/l (Limit 2010) for the ready to use product. This product is in accordance with the EU Directive 2010.

AB-POX 065 N Plus; 2.00/07.01.19. Before use, please check that this is the actual edition of the Technical Data Sheet. The information contained in this Technical Data Sheet is of a general nature and is provided in good faith and we accept no liability for errors or omissions. Because use and application of this product are out of our control and depend, concerning substrate, load and method of application, on the particularities of the individual case, our advice, verbal, written or based on tests, does not exempt the applicator from testing the suitability of the products for the intended use.

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