



NEXLER EPOLIS EP 601

Two-component epoxy primer

TECHNICAL DATA

Ingredients: - component A - component B	epoxy resin, filler, pigment, additives hardener
Colours	transparent, slightly straw-coloured
Density: - component A - component B	1,04 - 1,16 g/cm ³ 0,94 - 1,04 g/cm ³
Mixing ratio (by weight)	100 : 23,5 (component A : component B)
Recommended number of layers	1
Time of suitability for use after mixing the ingredients	45 min
Time interval between applying individual layers	24 h
Full hardening time of the coating	7 days
Pedestrian traffic load	after 24 h
Bituminous felt assembly	after 24 h on a substrate dry to the touch
Bond strength from concrete surface, using the „pull-off“ method	≥ 2,0 MPa
Bond strength from concrete surface after 200 cycles of freezing and thawing in water, at the temp.: -18°C / +18°C, using the "pull-off" method	≥ 2,0 MPa
Assessment of the condition of the coating placed on the concrete surface, after 200 cycles of freezing and thawing in water, at the temp.: -18°C / +18°C	no changes
Rate of water absorption limitation	≥ 60%
Residue on sieve with a 0.063 mm square mesh - component A	0,3% at most
Smearing - component A	50 µm at most
Flash point - component A	above 130°C
Drying time at the temp. of 20 ± 2°C and relative air humidity of 55 ± 5% - grade 1 - grade 4	0,5 h at most 10 h at most
Flexibility of the coating	2 mm at most
Adhesion of the coating tested with a rotary cutter	grade 2 at most
Resistance of the coating to exposure to: - 3% solution of NaCl for 24 h, with a temp. 20 ± 2°C - 10% solution of Na ₂ CO ₃ for 2 h, with a temp. 60 ± 5°C - MS-20 oil for 6 h, with a temp. of 60 ± 5°C	no changes in the coating no changes in the coating no changes in the coating
Temperature of use	from +15°C to +30°C
Relative air humidity	max. 70%
Consumption as a primer	0,2 - 0,5 kg/m ² depending on substrate absorbency
Reference document(s)	IBDiM-KOT-2019/0277 issue 3

PROPERTIES

- Very good adhesion to substrate
- Reinforces the primed substrate
- Resistant to acidic or alkaline chemical media, water impact and marine and industrial atmospheres as well as to frost

APPLICATION

- Priming mineral and steel substrates prior to application of NEXLER EPOLIS EP 602 epoxy membrane
- Reinforcing an absorbent, porous substrate or a substrate with a low mechanical resistance
- Creating a bonding layer on sanded ceramic cladding, stone, terrazzo, steel surfaces
- Priming substrates under weldable bituminous felt, including wet ones (fresh, young concrete), in particular under bridge bituminous felt e.g. NEXLER MOST+



VELOUR ROLLER



PAINT BRUSH

PACKAGING

Poland

- Packaging set:
20 kg (16,2 kg + 3,8 kg)

Export

- Packaging set:
20 kg (16,2 kg + 3,8 kg)

METHOD OF USE

▪ CONDITIONS OF USE

The work should be carried out at an ambient temperature of +15 to +30°C, with a maximum relative humidity of 70%. Higher temperatures and humidity accelerate the setting time of the mix. At lower temperatures, a delay in setting is to be expected, as well as a change in the consistency of the material and as a result of that an increase in consumption. The temperature of the substrate must always be at least 3°C above the dew point temperature until the material is fully cured.

Works should not be carried out during precipitation and strong sunlight.

The premises where the work takes place must be sectioned off, protected from unauthorised access and a safety zone must be maintained against the use of open flames, particularly before conducting welding work. During the works, very good ventilation of the work area should be ensured.

▪ SUBSTRATE PREPARATION

The concrete substrate must be made of concrete of min. C20/25 grade, with a strength of at least 1.5 MPa measured by the pull-off method. The substrate must be stable, continuous, even, bonded. It must be clean and free of oil, grease, cement laitance and other substances that impair adhesion. The substrates should be cleaned mechanically, dust, any loose layers and sharp protruding edges should be removed. The substrate should be in an air-dry condition, without any visible traces of moisture or darkening caused by moisture.

It is allowed to use the primer on a damp substrate when used under a weldable bituminous felt. Then the surface of the concrete should be in a matt-damp condition, without a glossy layer on the surface. The moisture content of the concrete after at least 7 days of curing should not be more than 15%.

Steel surfaces should be cleaned of rust and other impurities to a cleanliness grade of Sa 2½.

▪ PRODUCT PREPARATION

Components A and B are supplied in a proper mixing ratio. Mix component A in the delivery vessel in order to homogenise and evenly distribute the mineral filler. Then add the total amount of ingredient B and mix with a mechanical stirrer at 300 - 600 rpm for approximately 3 minutes. While mixing, scrape the mixture from the sides and bottom of the vessel with the mixer to ensure thorough distribution of the hardener. After mixing, pour the material into the working vessel and mix again.

If partial use is assumed, the product should be prepared maintaining the weight ratio of the components (100 parts component A and 23.5 of component B).

The permissible application time of the mixed material at a temperature of +20°C is up to 45 min.

▪ APPLICATION METHOD

The coating can be applied by a brush or roller.

Pour the mixture onto the prepared substrate and spread with an appropriate tool, obtaining a thin, even layer and leaving no excess primer in the cavities.

If levelling compounds or adhesive cement mortars are to be used on the coating of **EPOLIS EP 601**, the freshly primed surface should be sprinkled with quartz sand of grain size 0.4 - 0.8 mm. Once the primer has set, excess sand should be removed. When applying **EPOLIS EP 601** under weldable bituminous felt, the version with or without sand can be used.

Apply subsequent layers to the primed substrate no later than after 24 hours. After a longer interval, the primed surface must be sanded and dusted.

▪ CONTROL OF PERFORMANCE

When fresh, check the consumption of the material per unit and/or dedicated area on an ongoing basis.

The appearance of the completed coating depends on the ambient temperature and humidity, the absorbency of the substrate and the method of application.

The bonded coating should have a uniform texture, without bulges, air bubbles, wrinkles or cracks.

TOOLS AND TOOL CLEANING

Velour roller with short bristles, paint brush, slow stirrer.

Before using the roller for the first time, loose hair should be removed from the roller, e.g. by wrapping it with self-adhesive painter's tape and then peeling off the tape.

Clean tools with acetone or xylene immediately after use (resin must be in an unbound state). After the resin dries, clean tools mechanically.

STORAGE AND TRANSPORT

The shelf life of the product is 12 months from production date. Store in dry and airy rooms at temperature from +10°C to +25°C in tightly sealed, original packaging. Protect the product from heat and exposure to direct sunlight. The product should only be transported by covered means of transport. Prior to application, **EPOLIS EP 601** should be seasoned for at least 24 hours in a room with a minimum temperature of 15°C.

The binder has a limited tendency to crystallise during storage - crystallisation is a natural phenomenon and does not significantly affect the properties of the product. If crystallisation occurs, gradually heat the resin to 40 - 50°C and homogenise.

NOTES

Works should be carried out in accordance with technical conditions, manufacturer's instructions, health and safety standards and regulations.

For information on how to deal with symptoms of disease, allergies or irritation of the skin and eyes, please refer to the Safety Data Sheet (www.nexler.com).

The remaining content of the product and container should be handed over to authorized companies.

GENERAL RECOMMENDATIONS

Technical data and information on the method of use are given for a temperature of 23°C ± 2°C and a relative air humidity of 55%. In other conditions, the setting (drying) time may change significantly.

The consumption of the product given in this sheet depends on the preparation and type of the substrate.

Coatings of this type are "sensitive" products and must be handled very carefully with attention to all elements that may affect the quality and appearance of the coating being applied.

In systems using aggregate, use dried, fractionated quartz aggregates that have been washed and dusted.

The user of the product is obliged to use it in accordance with its intended use and recommendations. In all cases, it is recommended to carry out an appropriate test.

SAFETY INFORMATION

Component A: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Wash hands and exposed parts of the body thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Collect spillage. Dispose of contents/container to according to the instructions of the manufacturer or person authorized to dispose of waste.

Component B: Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Collect spillage. Dispose of contents/container to according to the instructions of the manufacturer or person authorized to dispose of waste.

IMPORTANT INFORMATION

Please refer to the detailed conditions of use of the product before use. We guarantee the quality of our materials as part of our terms of sale and delivery.

For buildings with special requirements that are not covered by this manual, we provide our Customers with our own professional advisory service.

The manufacturer has no influence on the improper use of the material, its use for other purposes or under conditions other than those described above. The guarantee only covers the quality of the delivered product. The correct and therefore effective use of the product is not subject to our control.

Neither the manufacturer nor his authorized representative may be held liable for any loss incurred as a result of improper use or storage of the product.

Employees of the company are authorized to provide technical information only and solely in accordance with this technical data sheet. Information other than that contained in this sheet should be confirmed in writing.

If you have any doubts, consult the manufacturer.

Once we have issued a new technical data sheet, this manual is no longer valid.

CONTACT DETAILS

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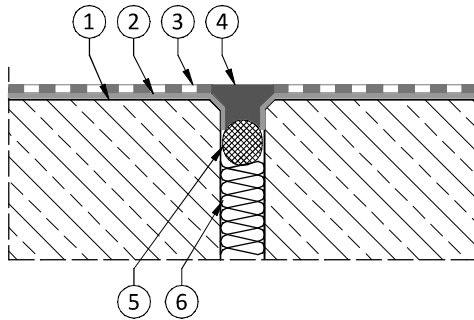
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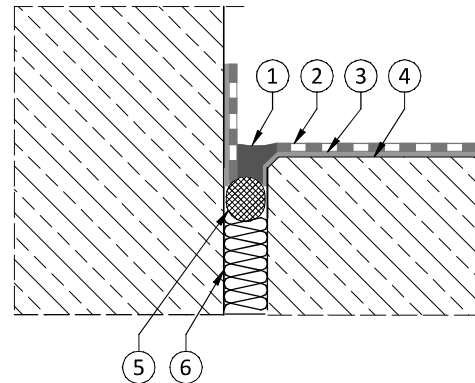
DETAILS

Detail of floor expansion joint - case of predominantly pedestrian traffic load



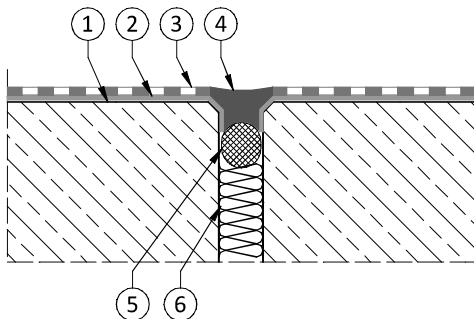
1. Reinforced concrete substrate
2. **NEXLER EPOLIS EP 601** epoxy primer
3. NEXLER EPOLIS EP 602 epoxy coating with a topping of quartz aggregate
4. Filling of the expansion joint - NEXLER EPOLIS EP 603 Poziom
5. NEXLER Expansion Cord with a diameter 20% bigger than the width of the gap
6. Polystyrene filling

Detail of floor expansion joint - expansion joint in the plinth area



1. Filling of the expansion joint - NEXLER EPOLIS EP 603 Poziom
2. NEXLER EPOLIS EP 602 epoxy coating with a topping of quartz aggregate
3. **NEXLER EPOLIS EP 601** epoxy primer
4. Reinforced concrete substrate
5. NEXLER Expansion Cord with a diameter 20% bigger than the width of the gap
6. Polystyrene filling

Detail of floor expansion joint - case of intense mechanical traffic load



1. Reinforced concrete substrate
2. **NEXLER EPOLIS EP 601** epoxy primer
3. NEXLER EPOLIS EP 602 epoxy coating with a topping of quartz aggregate
4. Filling of the expansion joint - NEXLER EPOLIS EP 603 Poziom
5. NEXLER Expansion Cord with a diameter 20% bigger than the width of the gap
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