CONIPUR 111

Solvent Free, Thixotropic, Two Component PUR Adhesive for Elastic Layers

Product description
CONIPUR 111 is a solvent free, thixotropic, two component PUR adhesive.

Fields of application
CONIPUR 111 is an adhesive for pre-fabricated rubber granule and PUR foam mats on e.g. PUR substrates, asphalt or concrete.

It exhibits good adhesion to wood and steel. CONIPUR 2730 must be applied on aluminium and galvanised metal surfaces as an adhesion promoter before using CONIPUR 111.

CONIPUR 111 can also be used as an adhesive for linoleum on e.g. PUR coatings.

Properties
CONIPUR 111 is thixotropic in its' A component, features a long pot life and is easy to apply.

CONIPUR 111 exhibits good adherence to asphalt, wood, rubber granule mats and linoleum.

Technical Data

Mixing ratio	in parts by weight		5 : 1
Density	component A, at 23 °C	g/cm^3	approx. 1.65
	component B, at 23 °C	g/cm^3	approx. 1.23
	mix, at 23 °C	g/cm^3	approx. 1.56
Viscosity	component A, at 23 °C	mPas	thixotropic
	component B, at 23 °C	mPas	approx. 200
	mix, at 23 °C	mPas	thixotropic
Pot life	at 12 °C	min	approx. 85
	at 23 °C	min	approx. 65
	at 30 °C	min	approx. 50
Substrate and application temperature	minimum	°C	10
	maximum	°C	40
Permissible relative humidity	maximum	%	90
Shore A hardness	after 24 h, at 23 °C and 50 % relative humidity		88
Shore D hardness	after 28 d		55
Tensile strength	DIN 53504	N/mm^2	13
Elongation at break	DIN 53504	%	53
Tear strength	DIN 53515	N/mm^2	39

Above figures are guide values and must not be used as a base for specifications!

Consumption

The consumption is approximately 0.8 – 1 kg/m^2 depending on the conditions on site, the properties of the sub-base.

This value strongly depends on the roughness and porosity of the sub-base and can only be seen as guiding value.

Application method

CONIPUR 111 is supplied in the correct proportions of component A (resin) and component B (hardener).

The optimal temperature of the material before and during application is between 15 and 25 °C.

The temperature of the substrate must be at least 3 °C above the current dew point temperature.

Pour component B into component A and ensure that the pail containing component B is emptied completely, scrape the edges of the pail with a spatula.

To achieve a homogenous consistency, both components must be thoroughly mixed with a slowly rotating mixing device at about 300 rev/min. Ensure that the mixing device reaches side and bottom areas of the mixing vessel.

The mixing process ought to take at least 2 minutes and must be performed until the blend is homogenous and streak free.

Under no circumstances, the material must be applied out of the original pack. Then pour the mix into another clean pail and mix it again for 1 additional minute.

After stirring, the material is applied onto the pre-treated substrate with a notched trowel. The consumption depends on the substrate and surface structure, as well as material and ambient temperature.

CONIPUR 111 has to be applied to the substrate in the full width of the rubber granule mat, PUR foam mat or linoleum. The mats have to be cut according to the dimension of the surface and be rolled onto the freshly applied adhesive. Weights have to be put on the end of the mat and at suitable intervals along the length.

After about 30-60 minutes, the surface has to be rolled with a 50 kg roller in order to prevent the formation of blisters and areas of insufficient adhesion.

The working life and curing time of CONIPUR 111 is influenced by the ambient, material and substrate temperature. At low temperatures, the chemical reactions are generally slowed down; this lengthens the pot life, re-coating interval and open time. As the same time, the viscosity increases which leads to a higher consumption. High temperature and humidity accelerate chemical reactions so that the time frames mentioned above are shortened accordingly. Direct sunshine shortens the time frames considerably.

After application, the material must be protected from direct contact with water for approx. 20 hours (at 15°C). Within this period, contact with water can cause bubbles or foaming on the surface.

Outdoors, the application of CONIPUR 11 must be stopped immediately in case of (expected) rain.

Cleaning agent

Re-usable tools must be cleaned carefully with CLEANER 40 or other suitable solvents (e.g. butyl acetate). Never use water or alcoholic solvents as cleaners.

Substrate condition

Substrates to be coated have to be firm, dry and load bearing, free of loose and brittle particles and substances which impair adhesion such as oil, grease, rubber skid marks, paint or other contaminants.

A pre-treatment of the substrate by grit or shot blasting, high-pressure water jetting, grinding or scabbing including the necessary post-treatment is only necessary, when the layer is soiled or the re-coating intervals have been exceeded. The bond strength of the substrate must be at least 1.5 N/mm^2.

Under above conditions, CONIPUR 111 can be applied onto asphalt without using a primer.

On concrete, it is necessary to apply CONIPUR 74 or CONIPUR 73 (see product data sheets) before applying in situ rubber granule mats. The bond strength of the substrate must be at least 1.0 N/mm^2. The residual moisture must not exceed 4 % (check with CM equipment), which corresponds to maximum 75 % relative humidity according to ASTM F 2170. If using the calcium chloride test, the maximum allowable vapour emissions is 4.0 lbs. as per ASTM F 1869.

The temperature of the substrate must be at least 3 °C above the current dew point temperature.

Pack size
CONIPUR 111 is supplied in 25 kg working packs. Components A and B are supplied in the correct proportions and delivered separately.

Colour
brown-beige

Storage
Store in original closed pails under dry conditions at a temperature range of 5 - 25 °C.

Do not expose the drums to direct sunlight.

Before use, please see "best before" date on the pail / drum.

Safety precautions
CONIPUR 111 is non-hazardous in its cured condition.

For protective measures, transport regulations and waste management please refer to the Material Safety Data Sheet of the product.

CONIPUR 111 meets the requirements of the EC directive 2004/42/EC.

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