CONIPUR 224 (N)

Two Component, Self-Levelling, low emission PUR Coating for Sports Halls

Product description
CONIPUR 224 (N) is a two component, solvent free, self-levelling PUR coating.

Fields of application
CONIPUR 224 (N) is used as a coating for indoor sports halls on resilient base layers, such as pre-fabricated or in situ installed rubber granule mats, PUR foam mats or polyethylene foam on top of hard PUR intermediate layers.

Depending on the system structure, point elastic, mixed elastic or combined elastic sports hall surfaces can be installed.

Application on wooden or other substrates is possible.

CONIPUR 224 (N) can also be used for re-toppings of existing PUR sports hall floorings.

Properties
CONIPUR 224 (N) exhibits high mechanical properties, good self-levelling and excellent de-aeration properties.

The product shows high elasticity, noise dampening and high resistance to impact at a medium hardness.

To improve the chemical resistance and light and colour stability, a sealing lacquer has to be applied on top of CONIPUR 224 (N).

Technical Data

Mixing ratio	in parts by weight		3.5 : 1
Density	component A, at 23 °C	g/cm^3	approx.1.32
	component B, at 23 °C	g/cm^3	approx 1.20
	mix, at 23 °C	g/cm^3	approx 1.29
Viscosity	component A, at 23 °C	mPas	approx 2500
	component B, at 23 °C	mPas	approx 200
	mix, at 23 °C	mPas	approx 1500
Pot life	at 12 °C	min	approx 47
	at 23 °C	min	approx 31
	at 30 °C	min	approx 25
Re-coating interval / ready for foot traffic	at 23 °C and 50 % relative humidity	h	approx 8
Substrate and application temperature	minimum	°C	10
	maximum	°C	30
Permissible relative humidity	maximum	%	75
Shore A hardness	after 24 h, at 23 °C and 50 % relative humidity		65
	after 28 d		80
Tensile strength	DIN 53504	N/mm^2	7.0
Elongation at break	DIN 53504	%	150
Tear strength	DIN 53515	N/mm	15.0

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

Application method

CONIPUR 224 (N) 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. To achieve a homogenous mix, thoroughly mix 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 takes at least 2 minutes and must be performed until the blend is homogenous and streak free. Pour the mix into another clean pail and mix it again for 1 additional minute.

CONIPUR 224 (N) is applied to the pre-treated substrate using a squeegee, scraper or a notched trowel. When working at the recommended ambient and substrate temperatures, it is not necessary to flame or to spike roll the coating in order to obtain a bubble free and well levelled surface.

Working life and curing time of CONIPUR 224 (N) are influenced by the ambient and substrate temperature. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, re-coating interval and open time. High temperature and humidity accelerate chemical reactions so the contrary is true. To fully cure the material, the substrate and working temperature must not fall below the minimum.

After application, the material must be protected from direct contact with water for approx. 12 hours (at 15 °C). Within this period, contact with water can cause foaming on the surface of the coating.

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

CONIPUR 224 (N) is usually applied to pre-fabricated or in-situ rubber granule mats (previously sealed with pore sealer), PUR foam mats or hard PUR coatings (CONIPUR 248).

In order to ensure a 100 % seal of the elastic layers our pore sealer CONIPUR 220 has to be applied in 2 layers prior to the coating CONIPUR 224 (N). This eliminates the possibility of bubbles in the coating.

For in-situ built elastic layers CONIPUR 203 is used as pore sealer, the first layer to be ground, the second not.

In case of coatings or pore sealers older than 3 days, grinding and cleaning with a 1:1 mixture of water : acetone of the surface is mandatory. After thoroughly drying a coating with CONIPUR 224 (N) is possible.

For application on other substrates, e.g. wood, preliminary tests have to be performed in order to determine if a primer / which primer is needed.

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

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

If the rubber granule mat is thicker than 10mm or the sports hall is for multipurpose use, an additional reinforcing fabric must be installed to increase the impact resistance and prevent cracking. Fabrics are to be fixed to the resilient layer using CONIPUR 220 (see technical data sheet).

CONIPUR 224 (N) can also be used for the re-topping of existing sports hall surfaces. As a rule, crack free surfaces must be ground and cleaned thoroughly using an alkaline cleaning agent. After drying, CONIPUR 224 (N) can be applied.

If there are small cracks in the surface, apply a reinforcing fabric using CONIPUR 220 to adhere it to the surface. Depending on the surface condition extra preparation might be necessary. Preliminary tests must be carried out prior to the retopping.

Pack size

CONIPUR 224 (N) is supplied in 25 kg working packs. Components A and B are supplied in the correct proportions and delivered separately.

Colour

Standard colours: RAL 6021 (green), RAL 7032 (grey), RAL 1001 (beige), RAL 5024 (blue) and oxide red.
Other colours upon request.

Storage

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

Do not expose to direct sunlight.

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

Safety precautions

CONIPUR 224 (N) 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 224 (N) meets the requirements of the EC directive 2004/42/EC.

CONICA AG
Industriestr. 26
8207 Schaffhausen
Switzerland

Tel.: +41 52 644 3600
Fax: +41 52 644 3699
info@conica.com
www.conica.com

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