CONIPUR 4080

Moisture Curing Single Component PUR Binder with High Colour Stability

Product description
CONIPUR 4080 is a moisture curing, solvent free, unpigmented PUR binder of medium viscosity.

Exposed to UV light, CONIPUR 4080 exhibits good colour stability.

Fields of application
CONIPUR 4080 is used as a moisture curing binder for coloured EPDM granules. It is used for the manual construction of in-situ EPDM layers for sports surfaces and children's playgrounds.

Properties
Due to the medium viscosity, CONIPUR 4080 is easily mixed with the EPDM granules and the run-off from the granules is minimized.

Due to the special field of application CONIPUR 4080 features a long processing time, so that the joints can be adjusted easily for a rather long time.

CONIPUR 4080 exhibits good colour stability. Nevertheless, depending on the colour of the EPDM slight colour changes of the installed resilient layer can occur.

Technical Data

Density	DIN 53217, at 23 °C	g/cm³	approx. 1.06
Viscosity	at 23 °C	mPas	approx. 4000
NCO content	DIN 53185	%	approx. 6.15
TDI monomer percentage	DIN 55956	%	< 1.0
Ready for foot traffic	at 23°C / 50 % rel. hum.	h	approx. 32
Substrate and application temperature	minimum maximum	°C °C	15 30
Permissible relative humidity	minimum maximum	% %	40 75
Above figures are guide values and may not be used as a base for specifications!			

Application method
CONIPUR 4080 is a single component material where the ideal temperature 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.

For the installation of an EPDM layer, mix EPDM (grain size 1-3.5 mm) and CONIPUR 4080 using a forced mixer rotating at approximately 300 rev/min, for 3-5 minutes. Ensure that the mixer reaches the sides and bottom areas of the mixing vessel.

The material is applied using a trowel. In order to achieve good surface strength, the rubber granule mat must be compacted thoroughly. If necessary, use a compaction roller.

Particular attention must be paid to the construction joints (for instance when changing the EPDM colour), which have to be well trowelled and compacted. If not, there may develop flaws which later on may lead to cracks in the surface.

If the recommended quantity of CONIPUR 4080 is reduced, the mechanical characteristics decrease and the requirements of DIN V 18035-6 specifications might not be met.

The rubber granules must be dry as moisture will accelerate the curing of the binder making installation more difficult or even impossible and may result in the binder foaming, leading to an uneven surface and a weak mat.

The working life and curing time of CONIPUR 4080 are influenced by the ambient, material and substrate temperature, as well as by humidity. At low temperatures and humidity, the speed of reaction is reduced resulting in a longer pot life, re-coating interval and open time. At the same time, the viscosity increases requiring increased mixing time and a higher consumption. At high temperatures and humidity, the speed of reaction is accelerated and the contrary is true.

Must the humidity be below 40 % it may be necessary to carefully mist spray the mat with water to avoid unacceptable curing times, which might impair the quality of the elastic layer.

At low temperatures, curing can be slightly accelerated by the use of catalyst. The quantity of catalyst needed depends on the ambient conditions and has to be defined at the job site and may vary daily. As a guide, 0.2 % w/w of ACCELERATOR 12 or 10, as a percentage of the binder, may be used.

For the installation of an EPDM layer, we recommend the use of EPDM granules that have been tested and shown to be suitable for use with CONIPUR 4080.

Cleaning agent

Re-usable tools must be cleaned carefully with CLEANER 40 or other suitable solvents (e.g. butyl acetate) before curing has taken place. Never use water or alcoholic solvents as cleaners on uncured materials.

Substrate condition

CONIPUR 4080 is normally used as conditionally UV-resistant binder for the installation of an EPDM layer on an in-situ installed shock pad.

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

Pack size

CONIPUR 4080 is supplied in 20 kg plastic pails or 220 kg drums

Colour

colourless

Storage

Store in original closed packing, 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 4080 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 4080 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