

CONIPUR 6090

UV and Colour Stable, Aliphatic, Moisture Curing Single Component PUR Binder

Product description

CONIPUR 6090 is a moisture curing, aliphatic (UV and colour stable), solvent free, unpigmented PUR binder of medium viscosity.

Fields of application

CONIPUR 6090 is used as a moisture curing binder for coloured EPDM granules, UV and colour stable.

It is installed with a paver for the construction of in-situ EPDM layers for multipurpose surfaces and children's playgrounds.

Due to the special field of application CONIPUR 6090 features a long processing time, so that the joints can be adjusted easily for a rather long time.

Properties

Due to the medium viscosity, CONIPUR 6090 is easily mixed with the EPDM granules and the run-off from the granules is minimized.

An overview ("EPDM binder type") of the different binder types for playground and multipurpose surfaces and their suitability for sensitive EPDM granulate colours can be sent on request.

Technical Data

Density	DIN 53217, at 23 °C	g/cm ³	approx. 1.07
Viscosity	at 23 °C	mPas	approx. 4800
NCO content	DIN 53185	%	approx. 6
Ready for foot traffic	at 23 °C / 60 % rel. hum.	h	approx. 48
Substrate and application temperature	minimum	°C	15
	maximum	°C	30
Permissible relative humidity	minimum	%	40
	maximum	%	75

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

Application method

CONIPUR 6090 is a single component product 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 an EPDM surface, 20 % of CONIPUR 6090 is mixed with the EPDM granules (grain size 1-3.5 mm) using a compulsory 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 homogenous mix is applied using a paver. 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 a joint connection has to be made to an already cured section, it must first be primed with CONIPUR 6090 or CONIPUR 72 and reworked very carefully. If not, there may develop flaws, which later on may lead to cracks in the surface.

The smoothing of the joints during application of the binder-granule mix can be facilitated by using SMOOTHING AGENT, which is used to moisten the tools. It is a very pure product with only a slight odour. As the tools are only moistened, the consumption can be very low.

The reduction of the binder ratio is not recommended, as the mechanical characteristics decrease and might even fall below the requirements of the relevant standard.

The granules must be dry, otherwise, humidity acts as a catalyst and accelerates the chemical reaction with the binder, causing the binder to foam, the formation of a non-homogeneous layer and of poor mechanical properties.

The ambient temperature, the temperature of the material and the substrate and the humidity of the air are of decisive importance for the curing of CONIPUR 6090. 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.

For the installation of an EPDM layer, only EPDM [granules](#), which have been [tested](#) and shown to be [suitable](#) for use with CONIPUR 6090 maybe used.

In order to achieve the properties required in accordance with the relevant standard, the quantities and granulate sizes defined in the system data sheets must be used.

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 6090 is normally used as UV and colour stable binder for the installation of an EPDM layer on an in-situ installed elastic layer or on a bound subbase.

Substrates to be covered have to be dry, load bearing, free of loose particles and substances, which impair adhesion such as oil, grease, paint or other contaminants.

The [bound subbase](#) must fulfil the requirements according to DIN V 18035-6 in regards of compaction, flatness, gradients and permeability.

On [concrete](#), it is necessary to apply CONIPUR 74 or CONIPUR 4710 (solvent free) (see product data sheets) before installing in situ rubber granule mats. The bond strength of the substrate must be at least 1.0 N/mm² (check with an approved pull off tester e.g. Herion, load rate 100 N/s).

The [residual moisture](#) of the substrate 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.

On [asphalt](#), primer CONIPUR 70 must be used. Never use CONIPUR 74 on asphalt.

The [temperature](#) of the [substrate](#) must be at least 3 °C above the current dew point temperature.

Pack size

CONIPUR 6090 is supplied in 220 kg drums or 20 kg pails

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 6090 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 6090 meets the requirements of the EC directive 2004/42/EC.