

# CONIPUR 7310

## Two Component PUR Based Structural Spray Coating

### Product description

CONIPUR 7310 is a two component, solvent free, PUR based structural spray coating.

### Fields of application

CONIPUR 7310 is a PUR based spray coating which can be applied directly over base coat CONIPUR J base (serving as replacement for asphalt) on asphalt or on primed concrete, creating a permeable structural surface.

### Properties

CONIPUR 7310 exhibits good adhesion to either CONIPUR J base, asphalt or (after application of a primer) on concrete.

For the construction of spray coated surfaces, it is mixed with CONIPUR EPDM granules (0.5-1.5 mm) and CONIPUR EPDM powder.

When exposed to **UV light**, the material can slightly **chalk** and, depending on the colour, a discoloration might be observed. For the standard colours oxide red and oxide green only the gloss will change slightly. For blue and grey colour massive changes have to be expected (blue will turn green, grey will turn beige).

The application of the sealers CONIPUR 2200 or CONIPUR 2210 with same colour shade protects the spray coated surface from colour changes and chalking.

### Technical Data

<b>Mixing ratio</b>	in parts by weight		100:30
<b>Density</b>	component A, at 23 °C	g/cm <sup>3</sup>	approx. 1.14
	component B, at 23 °C	g/cm <sup>3</sup>	approx. 1.22
	mix, at 23 °C	g/cm <sup>3</sup>	approx. 1.16
<b>Viscosity</b>	component A, at 23 °C	mPas	approx. 2300
	component B, at 23 °C	mPas	approx. 110
	mix, at 23 °C	mPas	approx. 1500
<b>Pot life</b>	at 12 °C	min.	approx. 68
	at 23 °C	min.	approx. 45
	at 30 °C	min.	approx. 35
<b>Substrate and application temperature</b>	minimum	°C	10
	maximum	°C	40
<b>Permissible relative humidity</b>	minimum	%	30
	maximum	%	85
<b>Tensile strength</b>	DIN 53504	N/mm <sup>2</sup>	7.6
<b>Elongation at break</b>	DIN 53504	%	70
<b>Tear strength</b>	DIN 53515	N/mm	8.5

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

### Application method

CONIPUR 7310 is working packs, containing 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** on the base course must be at least **3 °C** above the current dew point temperature.

Part B is poured into the pail of part A and thoroughly mixed using a slowly rotating mixer at about 300 rev/min ensuring that the mixer reaches the sides and bottom of the mixing vessel.

The **mixing** process takes **at least two minutes** and must be performed until the blend is **homogeneous** and streak free.

The mixed material is then tipped **into** a 2<sup>nd</sup>, **clean** pail / drum, **where** EPDM **granules** (0.5-1.5 mm) and EPDM

**powder** is **added** and mixed until a homogenous mixture is achieved.

We recommend to use a 60 : 40 : 2.5 mixture by weight (mix of CONIPUR 7310 : EPDM granules : EPDM powder).

**Proper** mixing is necessary in order to achieve a uniform sprayed surface. The spraying is done in **two layers**.

The EPDM **granules** used must **meet** the **specification** given in **our "Recommendations for Particle Size Distribution of Rubber Granules"**.

If necessary, the consistency of the mix can be **diluted** by adding **max. 5 %** solvent (may not contain alcohols or water). We recommend THINNER 21.

At **low temperatures** the percentage of EPDM **powder** can be **reduced**.

For **spraying** the mixture onto the base mat a specially designed spray machine is used. The coverage rate, **per coat**, must not exceed **1.2 kg/m<sup>2</sup>** of the mixture.

**Exceeding** the coverage rate can cause foaming of the coating due to the carbon dioxide formed during moisture curing of the material, becoming trapped inside the material which might cause a weakness of the mat.

In order to obtain **good wear resistance** of the sprayed surface, the EPDM granules have to be well imbedded into the polyurethane layer. This can only be achieved if the coating is applied in **two coats** at a **total rate of 2.0 kg/m<sup>2</sup>** of mixed material.

**Never** use **moist** EPDM granules or powder as the pot life can be shortened and the surface structure and the cleaning of the spray machine will be impaired.

Pot life and curing time of CONIPUR 7310 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. Direct sunshine shortens the time frames considerably.

Low air humidity increases the curing time but, in contrary to the installation of base mats, under **no** circumstances is **water** to be **sprayed** onto the surface.

In case of **low temperatures**, curing can be **accelerated** on the site using ACCELERATOR 10. The necessary amount to be added depends on the weather condition and has to be defined, daily, on site. As a guideline use 0.05-0.10 % ACCELERATOR 10 related to the amount of CONIPUR 7310.

During the first hours after application, the material must be protected from direct contact with water.

In case of (expected) **rain**, CONIPUR 7310 must not be applied.

### 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 7310 is used for the construction of water permeable structural spray coatings directly on our CONIPUR J base (replacing the asphalt layer), on asphalt (pre-treated with CONIPUR 70) or on concrete (pre-treated with CONIPUR 74 to ensure the adhesion).

The substrates 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.

The **residual moisture** of the concrete 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** on the base course must be at least **3 °C** above the current dew point temperature.

The **interval** between **two spray** applications must not exceed **48 hours**. In case of longer breaks, **clean** thoroughly and apply **primer** CONIPUR 72 (see product data sheet) to avoid poor adhesion.

In case of doubts carry out **adhesion tests** on the site.

### Pack size

CONIPUR 7310 A component is supplied in 26kg working packs with component A and B in the correct proportions.

### Colour

oxide red

### Storage

Store in original closed packing 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 7310 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 7310 meets the requirements of the EC directive 2004/42/EC.