

CONIPUR 2640

Solvent Free, Single Component PUR Based Structural Spray Coating

Product description

CONIPUR 2640 is a single component, solvent free and VOC free, PUR based, structural spray coating.

Fields of application

CONIPUR 2640 is a spray coating which is used for the construction of structural spray coats on polyurethane bound rubber granule mats to build a permanently elastic, water permeable or water impermeable sport surface, for example as track surface or a multipurpose field.

Properties

CONIPUR 2640 exhibits good adhesion to either pre-fabricated or in situ rubber granule mats. For the construction of spray coated surfaces it is mixed with

EPDM granules (0.5-1.5 mm), the mix is applied with a spraying machine.

Due to the high elasticity and excellent mechanical properties of CONIPUR 2640, such coated surfaces feature a high abrasion resistance.

When exposed to **UV light**, the product **chalks** slightly and, depending on the colour, a **discoloration** will be observed. For the standard colours oxide red and oxide green only the gloss will change slightly.

The application of the top coat CONIPUR 2200 or CONIPUR 2210 (improving the slip resistance) in the same colour protects the spray coated surface from colour changes and chalking.

Technical Data

Density	at 23 °C	g/cm ³	approx. 1.1
Viscosity	at 23 °C	mPas	approx. 1800
NCO content	DIN 53185	%	approx. 5.5
Substrate and application temperature	minimum	°C	10
	maximum	°C	40
Permissible relative humidity	minimum	%	30
	maximum	%	90
Tensile strength	DIN 53504	N/mm ²	20
Elongation at break	DIN 53504	%	approx. 800
Tear Resistance	DIN 53504	N/mm	approx. 25

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

Application method

Before application, CONIPUR 2640 must be **homogenised** which can be done by rolling the drums.

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.

For the application of a **structural** spray coating, CONIPUR 2640 is mixed with EPDM granules (grain size 0.5 - 1.5 mm), **60 : 40** parts by weight.

First, CONIPUR 2640 is weighed, then EPDM granules are added and **mixed** using an electric mixing device. Mixing must be done until the mix is **homogeneous**, but in any case for at least two minutes. Proper mixing is necessary in order to achieve a uniform sprayed surface.

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% of the solvent-free **SMOOTHING AGENT** (the mix will still be solvent free). At **low**

temperatures the percentage of EPDM granules 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/m²** of the mixture. Exceeding the coverage rate is not recommended, as this will cause foaming of the coating.

In order to obtain **good wear resistance** of the sprayed surface, the EPDM granules must be well imbedded into the polyurethane layer. This can only be achieved if the **coating is applied** at a **total rate of 2.0 kg/m²** of mixed material. Therefore, **two layers** must be applied.

Never use **moist** EPDM granules as the pot life will be shortened and the surface structure and the cleaning of the machines will be impaired.

Pot life and curing time of CONIPUR 2640 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.

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

In case of (expected) **rain**, CONIPUR 2640 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 2640 is used for the construction of water permeable structural spray coatings on pre-fabricated or in situ installed rubber granule mats or for the application of water impermeable structural spray coatings on pore sealed rubber granule mats.

These 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 **temperature** on the **base** course must be at least **3 °C** above the current dew point temperature.

For mats, which are **pore-sealed** (see product data sheet of the pore sealer), the application of CONIPUR 2640 must be done within **24 - 36 hours** after the application of the pore sealer. If re-coating does not take place **within** this **period** of time, **primer** CONIPUR 72

(see product data sheet) must be applied in order to avoid poor adhesion.

The **interval between** two **spray applications** must not exceed **48 hours**. In case of longer breaks, **clean** thoroughly. Normally, no primer has to be applied.

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

Pack size

CONIPUR 2640 is supplied in 210 kg drums.

Colour

oxide red, oxide green

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 2640 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 2640 meets the requirements of the EC directive 2004/42/EC.