



CONIPUR Vmax – CONIPUR Vmax FL

WA Certified Full Pour, Full Depth Colour System

Fields of application

high-performance sport, athletics tracks for top events

System data

| | | Product | Consumption | Application | Remarks |
|-----------------|---------------|---|---|-------------------|--|
| Primer | for asphalt: | no primer necessary | - | - | CONIPUR 74 is used for pre-fabricated concrete parts, e.g. for curb stones and drainage systems. Otherwise, CONIPUR 3785 has to be used. |
| | for concrete: | CONIPUR 74 | 0.20 kg/m ² | spray | |
| Coating | 1st layer | CONIPUR 2350 | 3.8 kg/m ² | propeller rake | Depending on the porosity of the substrate, additional amount of product must be considered. |
| | | CONIPUR EPDM granules, 1 - 3.5 mm | 5.5 kg/m ² (net consumption) | broadcast | Net consumption. In order to broadcast the surface excess granules are needed. The total quantity needed for this layer is approximately 10 - 11 kg/m ² |
| Coating | top layer | <p>Important: in order to achieve the necessary layer thickness, it is absolutely necessary to broadcast at least 10.0 kg/m² of EPDM granules</p> | | | <p>For track surfaces, a total amount of approx. 4.2 kg/m² must be calculated for the top layer incl. the excess quantity. In case both layers are installed in red colour, the total requirement is approximately 10 - 11 kg/m². For smaller surfaces, which are installed within one day, the excess quantity of EPDM granules must be increased accordingly.</p> <p>*** The consumption and excess quantity is the same</p> |
| | | CONIPUR 2375 | 3.0 kg/m ² | notched squeegee | |
| Coating | | CONIPUR EPDM granules, 1-3.5 mm | 2.8 kg/m ² (net consumption) | broadcast | <p>Depending on the climate conditions and the surface to be coated, it might be possible to reduce the excess quantity.</p> <p>For CONIPUR Vmax FL (flame retardant) CONIPUR 2375 FL and CONIPUR EPDM FL must be used in this layer, only then will the system achieve the fire classification Cfl-s1 ***. The coating and the granules contain flame retardants.</p> |
| | | | | | |
| Sealing lacquer | optional | CONIPUR 2200 (CONIPUR 2210) | 0.30 kg/m ² | spray (two coats) | CONIPUR 2210 with slip resistant properties |
| Line paint | | CONIPUR 8150 | 20-30 g/m | spray | |

Total thickness of the system

approximately 14 mm

Selected technical properties

| | | Result | Requirement | Remarks |
|--------------------------------|-------------------------------|---|---|---|
| Based on EN 14877 requirements | Force reduction | $\geq 36 \%$ | 25-50 % | Data taken from the test report according to EN 14877 |
| | Modified vertical deformation | $\leq 2.2 \text{ mm}$ | $\leq 3 \text{ mm}$ | |
| | Permeability | impermeable | | |
| | Resistance to wear | $\leq 2 \text{ g}$ | $\leq 4 \text{ g}$ | |
| | Tensile Properties | tensile strength elongation at break | $\geq 0.5 \text{ N/mm}^2$ $\geq 40 \%$ | |

Depending on the substrate, rubber source (particle size) and application conditions or in case of using alternative products, results vary.

Selected environmental data according to DIN V 18035-6

| | | Result | Requirement | Remarks |
|-----------------------------|--------------|-------------------------------|------------------------|---|
| Environmental compatibility | EOX | $\leq 8 \text{ mg/kg OS}$ | 100 mg/kg OS | Data taken from suitability test according to DIN V 18035-6 |
| | DOC | 24h $\leq 29 \text{ mg/l}$ | $\leq 50 \text{ mg/l}$ | |
| | Heavy metals | conform | | |
| | Smell | no smell | | |

Preparation

The bound base layer must fulfil the [relevant standards](#) with special reference to flatness, gradients, thickness, load bearing capacity and water permeability.

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

The [tear strength](#) of the base course must be at least 1.0 N/mm^2 .

The [residual moisture](#) 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 optimal [temperature](#) of the material before and during application is between **15** and **25 °C**.

EPDM consumption

For a track surface, it is generally assumed that the [daily installation capacity](#) is $1'000 \text{ m}^2$. Therefore, it is calculated as follows:

For the [first layer](#) and the first $1'000 \text{ m}^2$, a total of $10'000 \text{ kg}$ of EPDM granules will be consumed. $4'000 \text{ kg}$ of these granules are collected again after curing and used again.

Accordingly, $6'000 \text{ kg}$ of new granules and $4'000 \text{ kg}$ of collected excess granules are needed for the next $1'000 \text{ m}^2$.

For 5000 m^2 , a total of approx. $34'000 \text{ kg}$ of EPDM is required for the first layer, approx. $64'000 \text{ kg}$ for $10'000 \text{ m}^2$.

For the [second layer](#) and the first $1'000 \text{ m}^2$ a total of $4'200 \text{ kg}$ of EPDM granules will be needed. $1'200 \text{ kg}$ of these granules are collected after curing and used again.

Accordingly, $3'000 \text{ kg}$ of new granules and $1'200 \text{ kg}$ of collected granules are used for the next $1'000 \text{ m}^2$.

For 5'000 m², a total of approx. 16'200 kg of EPDM is required for the second layer, approx. 31'100 kg for 10'000 m².

If the **second layer** is to be built with fewer daily joints and the **daily capacity** is **increased** accordingly to approx. 2'000 m², more excess granules must be calculated.

Application

For precast concrete parts such as curbs and drainage systems, **CONIPUR 74** is applied preferably with a low-pressure airless device (for further information see product data sheet).

Allow the solvent to evaporate and the base course to become **sticky**, before applying the following layer. Depending on the prevailing humidity of the air, this is the case after about two hours.

Apply only primer in areas where the following layer will be installed within the next **12 hours**. If the application of the base layer does **not** take place **within** the **12 hours** period, a new coat of primer has to be applied in order to avoid poor adhesion.

CONIPUR 3785 must be used for **fresh concrete surfaces** such as shot put ring surrounds, net post foundations, pole vault entry boxes, take-off boards, etc.

CONIPUR 3785 is applied by rolling, or better with a rubber squeegee and by uniform rolling or brushing on the previously prepared substrate. Puddling or thick layers are to be avoided. For the first layer the **consumption** must be least **0.5 kg/m²** - do **not** sand.

The second layer of CONIPUR 3785 must be applied after at least 12 hours, but no more than 48 hours. If this is not possible, the substrate must be pretreated again (sanding or shot blasting).

To ensure the adhesion of the following polyurethane-based layer, the **2nd layer** of CONIPUR 3785 (consumption min. 0.35 kg/m²) must be **sprinkled** with **oven-dried quartz sand** (grain size 0.3-0.8 mm). Unbound quartz sand must be removed after curing (see product data sheet for further information).

For **water impermeable asphalt** substrate no adhesion primer is needed.

The pores of a water **permeable asphalt** must be closed so that not too much coating material runs off. This is done with either CONIPUR 2400 (approx. 2-2.5 kg/m² – depending on the porosity) or a mixture of CONIPUR 210 and EPDM powder.

Otherwise, the required total thickness of the track surface is not achieved. This also deteriorates the mechanical / sports functional properties.

Attention: the application of a pore sealer does **not** protect against rising humidity!

CONIPUR 2350 is applied to the pre-treated substrate using a propeller rake (4-6 mm) and broadcasted with **dry** CONIPUR EPDM granules (grain size 1-3.5 mm) to **excess** before curing takes place. Remove the excess EPDM granules (re-use for broadcasted coatings possible) when the coating has cured.

Apply for the **second layer** **CONIPUR 2375** (CONIPUR 2375 FL) and broadcast with CONIPUR EPDM (CONIPUR EPDM FL) granules (must be **dry**, grain size 1 - 3.5 mm) to **excess** before curing takes place. Remove the excess EPDM granules (re-use for broadcasted coatings possible) when the coating has cured.

Optionally, the surface can be sealed with pigmented **CONIPUR 2200** or CONIPUR 2210 (slip-resistant).

Sealing improves UV resistance, extends the life time and simplifies maintenance (easier and, in the long term, more cost-effective cleaning).

The top coat is sprayed in **two coats** from **opposite** directions with an approximate consumption of total **0.30 kg/m²**.

Further information and application instructions are shown in the product data sheet.

The track reaches its final hardness after 14 days under normal climatic conditions. It must not be used with spikes or subjected to mechanical loads before this time.

Remarks

For further information, please refer to the technical data sheets of the products or contact our Technical Service.

For application, conditions please see our *“General Application Guidelines for Sports Systems Indoor and Outdoor”*

CE-Label:

see Declaration of Performance



UKCA-Label:

see Declaration of Conformity

