

CONIPUR SW

IAAF Certified Sandwich System

Fields of application top class sports and athletic tracks

System data

		product	consumption	application	remarks
Primer	for asphalt	CONIPUR 70	0.15 kg/m ²	spray	
	for concrete	CONIPUR 74	0.20 kg/m ²	spray	
Base layer		CONIPUR 322 (CONIPUR 326)	1.4 kg/m ²	paver	
		Recycled rubber granules, 1-4 mm	6.5 kg/m ²		
Pore sealer		CONIPUR 203	1.4 kg/m ²	squeegee (or paver)	Depending on the temperature and quality of the porosity of the base layer, the consumption may vary. Instead of CONIPUR 203 CONIPUR 210 or CONIPUR 221 can be used in combination with EPDM powder. The powder must be checked for compatibility before use. Mixing ratio PUR : powder approx. 100:40.
Primer	Optional	CONIPUR 72	50-80 g/m ²	spray	If the coating layer can not be installed within 24 hours after the pore sealing, primer CONIPUR 72 must be applied to guarantee proper adhesion.
Coating	Top layer	CONIPUR 210 (CONIPUR 221)	2.2kg/m ² (2.3kg/m ²)	notched squeegee	
		CONIPUR EPDM granules, 1-3.5mm	2.8kg/m ² net consumption	broadcast	In total approx. 4.20kg/m ² should be calculated incl. the excess quantity
Sealing lacquer	optional	CONIPUR 2200 (CONIPUR 2210)	0.30kg/m ²	spray (in 2 coats)	
Line paint		CONIPUR 8150	20-30g/m	spray	

Total thickness of the system approx. 13 mm

Selected technical properties

		conditions	result	requirement	remarks
IAAF Specification	Force reduction	10 °C	35 %	35-50 %	
		23 °C	39 %		
		40 °C	41 %		
	Modified vertical deformation	10 °C	1.5 mm	0.6-2.2 mm	
		23 °C	1.9 mm		
40 °C	2.1 mm				
Friction (sliding coefficient)	wet, leather sole	0.62	≥ 0.5 (DIN method) ≥ 47 (TRRL method)		
Permeability		Impermeable			
Tensile Properties	tensile strength elongation at break	≥ 0.76 N/mm ² ≥ 88 %	≥ 0.5 N/mm ² ≥ 40 %		
DIN V 18035-6	Standard deformation	0 °C	0.7 mm	0.6-1.8 mm	
		20 °C	1.0 mm		
		40 °C	1.1 mm		
	Relative abrasion	3.0	> 1.0		
	Spike resistance		Class 1	Class 1	
Remaining indentation		0.45 mm	≤ 1.0 mm		
Ageing	Constant climate with condensation, constant heat (80 °C), combined climate of heat, humidity and light	pass	pass		
ASTM F 2157-08	Flammability behaviour		pass	pass	Data taken from suitability test according to ASTM F 2157-02
	Classification		Class A		

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

Selected environmental data

		details	result	requirement	remarks
Environmental compatibility according to DIN V 18035-6	DOC	48 h	6	≤ 20	Data taken from suitability test according to DIN V 18035-6.
		Heavy metals	Lead (Pb)	< 0.005 mg/l	
	Cadmium (Cd)		< 0.0005 mg/l	≤ 0.005 mg/l	
	Chromium _{total} (Cr)		< 0.005 mg/l	≤ 0.05 mg/l	
	Chromium VI (CrVI)		< 0.008 mg/l	≤ 0.008 mg/l	
	Mercury (Hg)		< 0.0002 mg/l	≤ 0.001 mg/l	
	Zinc (Zn)		0.83 mg/l	≤ 3.0 mg/l	
	Tin (Sn)		< 0.005 mg/l	≤ 0.05 mg/l	
	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 [moisture](#) level on 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.

Application

Apply CONIPUR 70, (if the base layer is [concrete](#), CONIPUR 74) onto the pre-treated [asphalt](#) sub-base using airless spraying equipment. Apply only primer in areas where the base layer will be installed within the next **24 hours**.

Allow the solvent to evaporate and the base course to become sticky, before applying the base layer. If the application of the base layer does not take place within the 24 hours period, a new coat of primer has to be applied in order to avoid poor adhesion.

Mix the recycled rubber granules (grain size 1-4mm) and CONIPUR 322 using a specially designed mixer. Apply the mixed material with a specially designed paver onto the primed surface. Let the base layer cure. The curing process depends on temperature and humidity.

Close the pores of the base layer with CONIPUR 203 (see system data) by using a flat squeegee, trowel or specially equipped paving machine.

If the pore sealed surface was exposed to rain, if it was wet or if the recoating interval of 24 hours was exceeded, CONIPUR 72 must be applied prior to the coating

After curing apply coating CONIPUR 210 with a notched squeegee. Broadcast the surface with [dry](#) CONIPUR EPDM granules to excess (grain size 1-3.5mm) before curing takes place. Remove the excess CONIPUR EPDM granules when the coating has cured.

Optionally, the surface can be sealed with pigmented CONIPUR 2200 or CONIPUR 2210, sprayed in 2 coats, from opposite directions.

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”*.

Suitable machinery for installing the in situ base layer is e.g. PlanoMatic and MixMatic from SMG, Vöhringen/Germany.