



# Test Report

Determination of sports surface properties

Report-No.: 903 5084-01

Client: Dr. Schutz GmbH  
Steinbrinksweg 30  
D-31840 Hessisch Oldendorf

Order-No. (Client): -

Order-No. (MPA): **903 5084 000 /Scz**

Test Item: **PVC surface treated with  
„UV PU Sealer mat“**

Specification Applied: [1] DIN EN 14904:2006-06  
Surfaces for sports areas –Indoor surfaces for multi-sports use –  
Specification

Date of Receipt of Test Item 23.11.2017

Date of Test: starting 23.11.2017

Date of Report: 04.12.2017

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Enclosures : 2

Supplements: -

Total Number of Pages: 5

Number of Reports: 1

The test results relate only to the items tested.

Publication of this report in full or partly is only allowed with written authorization by MPA University of Stuttgart.


## 1 Purpose of Investigation

You commissioned us with testing of technical properties of a surface for sports areas according to DIN EN 14904 [1]. Therefore we received two PVC surface samples (size approx. 20 cm x 70 cm) labeled as follows:

Sample 1: „UV PU Sealer mat“

The treatment of the PVC sample with the surface sealant „UV PU Sealer mat“ was done according to manufacturers' instructions (product specification sheet dated 28.03.2017) in one layer with 100 ml/m<sup>2</sup>.

## 2 Testing procedure

The tests were carried out according to the procedures mentioned in DIN EN 14904 [1]. The test marked with  is an accredited test according to DIN EN ISO/IEC 17025, see DAkkS-certificate D-PL-11027-04-07).

The following properties according to DIN EN 14904 [1] were determined:

Linear friction, specular reflectance, specular gloss, resistance to wear.

### 3 Results of Investigation

In the following table the test results obtained are tabulated and compared to the requirements of DIN EN 14904 [1].

The single test results can be found in tables 2-5, enclosures 1-2.

**Table 1: Summary of the test results according to DIN EN 14904 [1], sample 1 „UV PU Sealer mat“**

Test acc. to EN xx described in DIN EN 14904 [1]	Test results		Requirements acc. to DIN EN 14904 [1]
Linear friction <sup>■</sup> (EN 13036-4:2011)	105	max. deviation -4 / +4	80 – 110 (max deviation of single value +/- 4 units of mean value)
Specular reflectance (EN 13745:2004)	18,7 %		- <sup>1)</sup>
Specular gloss (EN ISO 2813:1999)	22,5 %		≤ 30 % at 85° for mat sport floor coverings
Resistance to wear (EN ISO 5470-1:1999)	759 mg		≤ 1000 mg (H18 wheel; 1000 cycles; load 1000g)

-<sup>1)</sup> no requirements acc. to DIN EN 14904 [1] – result has to be reported

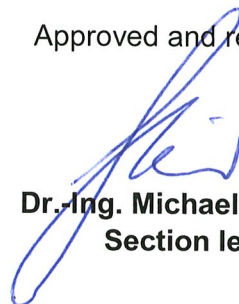
Prepared by



**Norbert Schulz**  
Testing Engineer



Approved and released by



**Dr.-Ing. Michael Stegmaier**  
Section leader

**Table 2: test results of linear friction acc. to DIN EN 14904 [1]**

Test spot	Linear friction	
	along	across
1	101	105
2	102	108
3	105	108
4	102	109
5	103	107
along/across Ø	103	107
<b>Total Ø</b>	<b>105</b>	

**Table 3: test results of specular reflectance acc. to DIN EN 14904 [1]**

Test spot No.	Specular reflectance [%]	
	along	across
1	18,51	18,19
2	18,21	18,51
3	19,08	19,40
Ø	18,6	18,7
<b>Total Ø</b>	<b>18,7</b>	



Table 4: test results of specular gloss acc. to DIN EN 14904 [1]

Test spot No.	Specular gloss [%]	
	along	across
1	22,0	23,2
2	20,6	22,6
3	23,8	23,6
4	22,6	22,7
5	22,6	22,6
6	22,2	22,0
Ø	22,3	22,8
<b>Total Ø</b>	<b>22,5</b>	

Table 5: test results of resistance to wear acc. to DIN EN 14904 [1]

Sample No.	Loss in mass [mg]
1	695,2
2	776,6
3	797,2
4	767,4
<b>Ø</b>	<b>759</b>

