Materials Testing Institute University of Stuttgart

P.O. Box 80 11 40 · 70511 Stuttgart · Germany





Test Report

Determination of sports surface properties

Report-No.:

903 5152 02

Client:

Bona AB

Murmansgatan 130 SE 200-21 Malmö

Order-No. (Client):

Order-No. (MPA):

903 5152 000 /Scz

Test Item:

Rubber surface treated with "Bona Pure"

Specification Applied:

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

[2] DIN V 18032-2:2001-04 Sport halls - Halls for gymnastics, games and multi-purpose use - Part 2: Floors for sporting activities,

requirements, testing

Date of Receipt of Test Item

30.03.2018

Date of Test:

30.03.2018

Date of Report:

05.04.2018

Page 1 of

3 text pages

Enclosures:

Supplements:

Total Number of Pages:

3

Number of Reports:

1

The test results relate only to the items tested.

Materials Testing Institute University of Stuttgart

Report-No.: 903 5152 02

Page 2 of 3 text pages

1 Purpose of Investigation

You commissioned us with testing of technical properties of a surface for sports areas according to DIN EN 14904 [1] and DIN V 18032-2 [2]. Therefor we received a rubber surface sample (size approx. 20 cm x 70 cm) labeled as follows:

Sample 1:

coated with "Bona Pure"

The rubber sample was treated with the varnish according to the manufacturer's instructions (product sheet dated 14.03.2018) in a single layer of 100-120 g/m²

2 Tests and Analyses Performed

The tests were carried out according to the procedures mentioned in DIN EN 14904 [1] and DIN V 18032-2 [2]. The tests performed are accredited tests according to DIN EN ISO/IEC 17025, see DAkkS-certificate (D-PL-11027-04-07).

3 Results of Investigation

The following test results were obtained.

Table 1: test results of linear friction acc. to DIN EN 14904 [1]: "Bona Pure"

| Test spot | Linear friction | |
|----------------|-----------------|--------|
| | along | across |
| 1 | 90 | 86 |
| 2 | 89 | 86 |
| 3 | 89 | 87 |
| 4 | 86 | 87 |
| 5 | 86 | 86 |
| along/across Ø | 88 | 86 |
| Total Ø | 87 | |

Report-No.: 903 5152 02

Page 3 of 3 text pages

Table 2: test results of sliding properties acc. to DIN V 18032-2 [2]: "Bona Pure"

| Testing spot no. | Sliding coefficient µ | |
|------------------|-----------------------|--|
| 1 | 0,40 | |
| 2 | 0,40 | |
| 3 | 0,41 | |
| 4 | 0,41 | |
| 5 | 0,40 | |

Summary

According to EN 14904 [1] the following requirements are valid: mean value (80 - 110), range (+/- 4 units). This requirement was fulfilled by the tested rubber sample coated with "Bona Pure".

According to DIN V 18032-2:2001-04 the following requirement is valid: $\mu_{\text{min.}}$ 0,4 - $\mu_{\text{max.}}$ 0,6. This requirement was fulfilled by the tested rubber samples coated with "Bona Pure".

Prepared by

O. Konrad **Testing Engineer** Approved and released by

Dr.-Ing. Michael Stegmaier

Head of Unit