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**Otto-Graf-Institut**  
Materialprüfungsanstalt Universität Stuttgart



## Investigation Report

Client: Graboplast zRt.  
Fehérvári u. 16/b  
H-9023 Győr  
Hungary

Order-No. (Client):

Order-No. (MPA): **902 7466 000-15U /Sc/Whr**

Test Item: **„Gamrat Sport“**

Specification Applied: EN 14808, Shock absorption; EN 14809, Vertical deformation  
EN 12235, Vertikal ball behaviour; EN 13036-4, Pendulum Test

Date of Receipt of Test Item 10.11.2014

Date of Test: beginning 17.11.2014

Date of Report: 19.11.2014

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.

Publication of this report in full or partly is only allowed with written authorization by MPA University of Stuttgart.  
In compliance with DIN EN ISO/IEC 17025 accredited Testing Laboratory recognized by DAkKS Deutsche Akkreditierungsstelle GmbH.  
Accreditation valid for testing methods listed in the certificates (Reg. No. D-PL-11016-00).

### 1 Purpose of investigation

You commissioned us to test the shock absorption, vertical deformation, vertical ball behavior and the friction of the vinyl sports floor "Gamrat Sport". For the tests we received a sample with the dimensions 1,0 x 1,0 m with a t-joint and the following description: Thickness: 4,0 mm

- CLP Top layer
- Glasfiber reinforcement
- PVC foam

### 2 Testing procedure

The tests were carried out according to EN 14808 (shock absorption), EN 14809 (vertical deformation), EN 12235 (vertical ball behavior) and EN 13036-4 (Pendulum Test). The procedures applied are accredited according to DIN EN ISO/IEC 17025:2005 (DAkkS-registration-no. D-PL-11016-01-09).

Testing conditions: 23-50-2 according to DIN 50014.

### 3 Test results

The following test results were obtained.

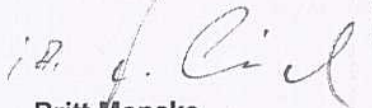
**Table 1: Test results**

Testing spot no.	Shock absorption [%]	Vertical deformation [mm]	Vertical ball rebound [%]
1 (T-joint)	9	0,4	99
2 (joint)	9	0,3	100
3 (area)	9	0,4	99
4 (area)	9	0,4	100
5 (area)	9	0,4	100
Mean	9	0,4	100

**Table 2: Friction**

testing spot no.	friction
1 alongside	102
2 crosswise	104
3 alongside	103
4 crosswise	104
Mean	103

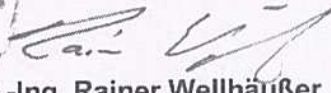
Prepared by



**Britt Manske  
Tester**



Approved and released by



**Dipl.-Ing. Rainer Wellhäuser  
Vice Section leader**