LABOSPORT





Scope of application

According to EN 14 904 (June 2006)

Surface for sports areas

Specification for indoor surfaces for multi - sports use.

This report has been established from the report R102172-A1.

This report contains 6 pages.

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1. APPLICANT

Firm	VINISIN LTD	
Date of order	02/02/2011	
Date of samples received	27/01/2011	
Sample reference	008611 / 008612 / 008613	

2. IDENTIFICATION

Product name	OMNISPORTS V65			
Description	 Plerglass Closedcell PVC foam backing Wear-layer Top Clean XP - Factory applied PU treatment 			
Picture				

Identification

	Manufacturer declaration	Labosport results	Units
Total thickness	6,5	7,0	mm
Mass per unit area	4,71	4,79	Kg/m²
Mass per unit volume	-	684	Kg/m³.
Hardness	-	77	shore A
Colour	Differents colors	Grey	



3. SCOPE OF TEST PROGRAMME & DESCRIPTION OF TESTS CARRIED OUT

The system was tested in accordance with NF EN 14904 : Surfaces for Sports Areas - Indoor Surfaces for Multi-Sports Use - Specification (June 2006), using the following test procedures :

3.1 Player/surface interaction

3.1.1 Friction

Surface friction was measured in accordance with NF EN 13036-4 using the Stanley RRL Pendulum fitted with the CEN rubber slider.

3.1.2 Shock absorption

Shock absorption was measured in accordance with NF EN 14808.

3.1.3 Deformation

Deformation was measured in accordance with NF EN 14809.

3.2 Technical aspects

3.2.1 Ball/surface interaction

Vertical ball rebound was measured in accordance with NF EN 12235 using a basketball.

3.2.2 Behaviour under a rolling load

Behaviour under a rolling load was assessed in accordance with NF EN 1569.

3.2.3 Resistance to wear

Resistance to wear was measured in accordance with EN ISO 5470-1 using the Taber Abrader fitted with H18 wheels 1kg load. CS10 wheels 500g load are used on lacquered surface.

3.3 Reaction to fire

EN 14904 states "if a claim for reaction to fire performance is made, the sports floor covering shall be tested and classified according to the requirements of EN 13501-1 and the resulting class and subclass shall be declared. If is decided to make no claim for reaction to fire performance, i.e. it is decided to place the product of family of products on the markets as Class $F_{\rm fl}$, no testing is required for this product or family of products."

This test was not requested by the applicant.

3.4 Formaldehyde emission

EN 14904 states "when formaldehyde-containing materials have been added to the product as part of the production process, the products shall be tested and classified into one of two classes E1 or E2". It also stated, "the test requirement does not apply to sports floor coverings to which no formaldehyde-containing materials were added during production or post production processing. It is not necessary to be classified, but may, without any testing be declared as Class E1".

This test was not requested by the applicant.



3.5 Content of pentachlorophenol (PCP)

EN 14904 states "sports floor coverings shall not contain pentachlorophenol or a derivative thereof as a component in the production process of the product or of its raw materials. In cases where verification is required, if the content is less than 0,1 % by mass by the method described in Annex C (of En 14904), this requirement shall be considered to be met".

This test was not requested by the applicant.

3.6 Specular gloss

Specular gloss was assessed in accordance with EN ISO 2813 using a reflectometer and a white light source at 85°.

3.7 Specular reflection

Specular reflection was measured in accordance with pr EN 13745 using a spectrocolorimeter and light source d8 at 85°.

3.8 Static load (indentation)

Resistance to static load was in accordance with NF EN 1516. The static load was 500 N acting on an area measuring 3 cm² for a period of 5 hours. The residual penetration was measured after 24 hours.

3.9 Impact strength (resistance to impact)

Impact resistance was measured in accordance with NF EN 1517. The sample was conditioned prior to test for 14 days at 50°C and tested at 10°C.

3.10 Resistance to repeated impact

Resistance to repeated impact was measured in accordance with TS 15122. This test is for information only, is non-mandatory and has no requirements.



4. <u>RESULTS</u>

Tests	Units	Requirements	Result	Uncertainty	Pass or Fail	
Friction	-	80 - 110	90	± 4	Pass	
Shock absorption	%	25 - 75	25	± 2	Pass	
Vertical deformation	mm	≤ 5,0	0,8	± 0,20	Pass	
Vertical ball rebound	%	≥ 90	98	± 3	Pass	
Rolling load	mm	≤ 0,50	0,40	-	Pass	
	-	No damage	No damage	-	Pass	
Resistance to wear	g	Synthetic surface : ≤ 1.00	0,12	-	Pass	
Specular gloss	%	Matt : ≤ 30	17	-	Pass	
Resistance to indentation	mm	< 0,50 mm	0,37	-	Pass	
Resistance to impact	-	Synthetic surface: no damage (no cracks, no indentation >0,5mm)	No damage	-	Pass	
Reaction to fire	Reaction to fire was not assessed as part of this test programme					
Formaldehyde Emission	Formaldehyde emission was not assessed as part of this test programme					
Content of Pentachlorophenol	Content of pentachlorophenol was not assessed as part of this test programme					
Repeated impact ¹	-	-	-	-	-	
Specular reflectance ¹	-	-	-	-	-	

¹ = Test on option



5. CONCLUSION

The results of the tests below mentioned, covered comply with the requirements of NF EN 14904 standard:

- Shock absorption (Type : P1)
- Vertical deformation (Type : P1)
- Friction
- Vertical ball rebound
- Rolling load
- Resistance to wear
- Specular gloss
- Resistance to indentation
- Resistance to impact

In conclusion, the tested sample "OMNISPORTS V65" by VINISIN LTD has been found to fully comply with the laboratory test requirements of NF EN 14904 (June 2006): *Surfaces for Sports Areas - Indoor Surfaces for Multi-Sports Use.*

Le Mans, March 23rd, 2017

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