



Test Report No.: 412.632

Date: 2014-05-06

Determination of lightfastness to organoid® decorative coatings

Client: Organoid Technologies GmbH
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Subject: Organoids® Decorative coatings

Contents: Determination the Lightfastness

Order: Order from 2014-03-11

Date of Sampling: -----

Place of Samples: Samples were submitted by the client

Entrance the Rehearse: 2014-03-11

Sign: Bia / Dr. Grill



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sind als solche gekennzeichnet.

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1 TASK

A determination of the light fastness was carried out on the transmitted decorative coatings.

2 SCOPE OF APPLICATION

The results contained in this test report have been obtained under the specific conditions of each test. As a rule, they are not the only criterion for evaluating the product and its suitability for the specific area of application.

3 SAMPLE MATERIAL

The following samples were provided by the client for the investigations:

- 3.1. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, inscribed and hereinafter referred to as “WILDSPITZE”
- 3.2. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “RINDA”
- 3.3. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “ROSCHT”
- 3.4. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, inscribed and hereinafter referred to as “BAMBOART”
- 3.5. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “BIRKA”
- 3.6. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “SKELETAL BLATTLA”
- 3.7. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter designated “HONF”

- 3.8. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “WOLLA”
- 3.9. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “LAWENDL”
- 3.10. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “PFEFFARMINZ”
- 3.11. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter designated “I<AKAU”
- 3.12. Section of an “organoid® decorative coating”, dimension approx. (160x60x3)mm, labelled and hereinafter referred to as “ROASA”

The following illustrations show the samples in the delivery condition:



Illustration 1: “WILDSPITZE” (Pattern 3.1) in the delivery condition



Illustration 2: "RINDA" (Pattern 3.2) in the delivery condition



Illustration 3: "ROSCHT" (Pattern 3.3) in the delivery condition



Illustration 4: "BAMBOART" (Pattern 3.4) in the delivery condition



Illustration 5: "BIRKA" (Pattern 3.5) in the delivery condition



Illustration 6: "SKELETON LEAFLA" (Pattern 3.6) in the delivery condition



Illustration 7: "HONF" (Pattern 3.7) in the delivery condition



Illustration 8th: "WOLLA" (Pattern 3 . 8th) in the delivery condition



Illustration 9: "LAWENDL" (Pattern 3.9) in the delivery condition



Illustration 10: "PEPPER MINT" (Pattern 3.10) in delivery condition



Illustration 11: “I<AKAU” (Pattern 3.11) in delivery condition



Illustration 12: “ROASA” (Pattern 3.12) in the delivery condition

4 EXAMS

The investigations were carried out from 19.03.2014 to 21.04.2014. The tests were carried out in the respective departments responsible within the scope of the competence of the authorized signatories according to the OFI QM manual.

4 Lightfastness

The determination of the light fastness was carried out on the decorative coatings according to ONORM EN ISO 105-B02 “Color fastness tests, Part B02: Color fastness to artificial light: xenon arc light”, issue 09/2013, in a xenon weathering device from Atlas, type Weather-Ometer Ci3000 (device no.: 2778). The test was carried out using the exposure cycle A1 at a Black standard temperature of $(47 \pm 3)^{\circ}\text{C}$ and a relative humidity $(50 \pm 5)\%$. Light fastness types made of wool fabric from 1 to 8 mar. ONORM EN ISO 105-B02. The exposure was continued until the light fastness



type 7 adjusted the contrast according to level 4 of the grey mar. staves showed. To assess the degree of discoloration (fading), the gray mar. rod according to ÖNORM EN 20105-A02 "Textiles - Colour fastness tests - Part A02: Grey mar. rod for the evaluation of the change of colour", issue 11/1994. The resistance according to the respective degree of lightfastness types of woollen fabric was considered to be achieved when the discolouration (fading) of the lightfastness types or parts of the specimens exceeded the degree 3 of the grey mar. staves. Light fastness types were also irradiated out of Wool fabric from 1 until 8th marked. ONORM EN ISO 105 - B02. The exposure was continued until the light fastness type 7 reached the contrast level 4 of the Graumar staff showed. To assessment of the degree of discoloration (bleaching) became the Graumar.stab according to ONORM EN 20105-A02, extiles - Color fastness tests - Part A02: "Gray scale for evaluating the change in color", edition 11/1994 , used. The stability according to the respective degree of light fastness types made of wool fabric was considered to have been achieved when the discoloration (fading) of the light fastness types or parts of the samples Degree 3 of the Graumar staff.

Table 1

Determination of Lightfastness according to ONORM EN ISO 105- B02	
Pattern	Lightfastness
"WILDSPITZE" (Pattern 3.1)	5
"RINDA" (Pattern 3.2)	6
"ROSHT" (Pattern 3.3)	4
"BAMBOART" (Pattern 3.4)	5
"BIRKA" (Pattern 3 . 5)	5
"SKELETTBLATTLA" (Pattern 3.6)	4
"HONF" (Pattern 3 . 7)	7
"WOLLA" (Pattern 3.8)	5
"LAWENDL" (Pattern 3.9)	5
"PEPPER MINT" (Pattern 3.10)	5
"CHOCAU" (Pattern 3 . 11)	6
"ROASA" (Pattern 3.12)	7



The present report No. **412.632**

Comprises 9 sheets with 1 tables, 12 illustrations, 0 supplements.

Clerk

Responsible test manager


Ernst Blang




Dr. Paul Grillberger

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