



INSTITUT PRO TESTOVÁNÍ A CERTIFIKACI, a. s.

třída Tomáše Bati 299, Louky, 763 02 Zlín, Czech Republic

Testing Laboratory

Testing laboratory * Calibration laboratory * Product certification body * Management systems certification body
Inspection body * Authorized body * Notified body

Number of pages: 3

Page : 1 ref. No. 412503666-03

TEST REPORT

ref. No. 412503666-03

Client: QVC Certification Services Pvt. Ltd

Address: 2-B Civil lines, Yukti Bussines Centre, Near Old Session Court
Ambala City 134003 Haryana, India

Issued for: Greenlam Industries Limited
GST No. 02AAFCG2966D1ZY
Vill-Paterh Bhonku, P.O.-Panjehra, Tehsil-Nalagarh, Distt-Solan (HP).
Nalagarh-174101, India

Sample: Exterior Grade laminate - "Greenlam"

Sample received on: April 30, 2021

Report elaborated by: Ing. Lada Matějková

Place and date of issue: Zlín, October 19, 2021



Ing. Jiří Samsonek, Ph.D.
Head of Testing Laboratory

Note: The results given in this Test Report apply only to the sample tested by our laboratory!
Without a written consent by Institut pro testování a certifikaci, a.s. Zlín, the Test Report may not be reproduced unless as a whole!

**INSTITUT PRO TESTOVÁNÍ A CERTIFIKACI, a. s.**

třída Tomáše Bati 299, Louky, 763 02 Zlín, Czech Republic

Testing LaboratoryTesting laboratory * Calibration laboratory * Product certification body * Management systems certification body
Inspection body * Authorized body * Notified body

Number of pages: 3

Page : 2 ref. No. 412503666-03

Description and identification of samples:**Table No. I - Sample description and identification**

ITC's identification number	Sample identification by client	Description of submitted sample
412503666/1	Exterior Grade laminate - "Greenlam"	Pieces of compact laminate



Pict. No. 1 Photo of samples

Sampling method used:

The test samples were collected and supplied to the laboratory by the client. The laboratory is not responsible for this way of sampling.

Work requested:

Determination of light fastness according to ČSN EN 438-2+A1:2019

Testing method used:

Artificial weathering test (determination of light fastness) according to ČSN EN 438-2 standard, section 29.

Test conditions:

Black standard temperature: $(65 \pm 3)^\circ\text{C}$, $(65 \pm 10)\%$ RH, irradiation intensity: $(60 \pm 3) \text{ W/m}^2$, spraying cycle 102 min (dry period): 18 min (spraying), continual irradiation, testing time period: 3009 hours (650 MJ/m^2).

Number of the test specimens used: 1; dimension of the test specimens: $(135 \times 45 \times 5,5) \text{ mm}$.

After the artificial weathering test the samples were conditioned $24\text{h}/23^\circ\text{C}/50\%\text{RV}$ in the dark and then evaluated in light box (illuminant type Home – 2856 Kelvin). The tested sample was assessment according to ČSN EN 20105-A02 and ČSN EN 438-2, section 29.5.3

Assessment method:

- Visual, based on a comparison of the contrast of reference and exposed test specimens with the colour of the grey scale standards (according to ČSN EN 20105-A02 standard). In the grey standard scale for assessing change in colour, the grade 1 corresponds to the greatest colour difference while the grade 5 to the zero difference in colour.

The laboratory is not responsible for information received from customer, which could have influence on the validity of the results. Further information required by the standard/standards and not given in this Test Report are available at a request at the Laboratory.

Testing laboratory:

Workplace no. 2 – třída Tomáše Bati 5264, Svit area, building No. 113, 760 01 Zlín

Note: The results given in this Test Report apply only to the sample tested by our laboratory!

Without a written consent by Institut pro testování a certifikaci, a.s. Zlín, the Test Report may not be reproduced unless as a whole!



Deviation from standard:

Light chamber.

Test result:

The test results are given in the following table:

Table No. II - Exterior Grade laminate - "Greenlam", sample reg. No. 412503666/1

Characteristics measured	Unit	Test results	Requirement ²⁾
Artificial weathering test according to ČSN EN 438-2 standard, section 29			
- after 650 MJ/m ² (3009 hrs)	degree of grey scale	degree 4	not worse than degree 3
- visual evaluation of surface			
- visual evaluation according to ČSN EN 438-2+A1, section 29.5.3	-	degree 4 ¹⁾	min. 4

¹⁾ visual evaluation according to ČSN EN 438-2+A1, section 29.5.3

Degree 5: No visible change

Degree 4: Only gloss change

Degree 3: Hairline surface cracks and / or surface damage.

Degree 2: Surface cracks

Degree 1: Blister formation and / or delamination.

²⁾ limit values set by the client



The samples without exposure The samples after exposure
Pict. No. 2 Photo of samples

M.Sc. Roman Dlabaja, Ph.D.
Head of Laboratory of Physics

Note: The results given in this Test Report apply only to the sample tested by our laboratory!
Without a written consent by Institut pro testování a certifikaci, a.s. Zlín, the Test Report may not be reproduced unless as a whole!