



**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

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## **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. 02AAF CG2966D1ZY  
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!**  
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**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 ( $650 \text{ MJ/m}^2$ ).

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 24h/ $23^\circ\text{C}/50\% \text{ RV}$  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

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**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 <sup>2)</sup>
Artificial weathering test according to ČSN EN 438-2 standard, section 29			
- after 650 MJ/m <sup>2</sup> (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 <sup>1)</sup>	min. 4

<sup>1)</sup> 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.

<sup>2)</sup> 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

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