

<b>Subject:</b>	<b>Amendment of test conditions stipulated in section 2.12.1</b>
<b>Proposal:</b>	<p><b><u>Laboratories WG – 26.05.17</u></b> The Laboratories WG recommended that the test conditions stipulated in Update Sheet No. 15 of the 14<sup>th</sup> Edition should be adapted as they did not correspond to those prescribed in the relevant ISO 16474-2.</p> <p><b><u>Florida/Powders WG – 06.07.17</u></b> Those present endorsed the proposals submitted and made some additional changes. A draft update sheet would be submitted to the next TC meeting.</p>
<b>QUALICOAT resolution:</b>	<p><b><u>Resolution No. 15/TC 23.05.17</u></b> The TC decided that the Laboratories WG's proposal for an amendment of section 2.12.1 should be submitted to the Powders WG together with QUALITAL's presentation on the accelerated weathering test.</p>
<b>Date of ratification:</b>	22–23 November 2017
<b>Date of application:</b>	<b>1 January 2018</b>
<b>Amendments to the Specifications:</b>	Section 2.12.1

## 2.12.1 Accelerated weathering test for all classes except class 3

### ISO 16474-2 Method A (daylight filters) – Cycle 1 (102 min. dry/18 min. wet)

~~Luminous intensity: 550 ± 20 W/m<sup>2</sup> (290–800 nm)~~

~~Black standard temperature: 65 ± 5°C~~

~~Demineralised water: maximum 10 µS~~

~~Special UV filter (290 nm)~~

~~Cycles of 18 minutes in a wet medium and 102 minutes in a dry medium.~~

#### Classes 1, 1.5 and 2

For granting an approval, three panels shall be tested for every single colour in different areas of the climatic chamber.

For renewals, only one panel shall be tested, except for class 2 powder coatings and for banned colours which shall also be tested in triplicate.

The position of all panels shall be changed approximately every 250 hours.

After 1000 hours exposure, the test panels shall be rinsed with demineralised water and checked for:

- Gloss variation: ISO 2813  
angle of incidence 60°
- Colour change: CIELAB  $\Delta E^*_{ab}$  using the formula in ISO 11664-4, measurement including specular reflection.

Three colour measurements are to be made on the test panels before and after the accelerated weathering test.

<b>Subject:</b>	<b>Amendment of test conditions stipulated in section 2.12.1</b>
-----------------	--

**REQUIREMENTS:**

Gloss retention<sup>5</sup>

The gloss retention shall be at least

- 50% for class 1
- 75% for class 1.5
- 90% for class 2

An additional visual assessment will be carried out for

- organic coatings with an original gloss value of less than 20 units;
- organic coatings with structured appearance in all gloss categories;
- organic coatings with a metallic or metallized effect (see Appendix A4).

Colour change:

The colour change ΔE shall not be greater than

- the limits prescribed in Appendix A7a for class 1
- 75% of the limits prescribed in Appendix A7a for class 1.5
- 50% of the limits prescribed in Appendix A7b for class 2[...]
- 

**FINAL ASSESSMENT OF THE ACCELERATED WEATHERING TEST (in the case of triplicate testing)**

The results of the instrumental measurements shall be evaluated according to the following criteria:

<b>PANELS (individual values)</b>	<b>ASSESSMENT</b>
3 panels OK	SATISFACTORY
2 panels OK and 1 panel NOT OK	SATISFACTORY
1 panel OK and 2 panels NOT OK	UNSATISFACTORY
3 panels NOT OK	UNSATISFACTORY

<sup>5</sup>

$$\text{Gloss retention} = \frac{\text{gloss value measured after testing}}{\text{initial gloss value}} \times 100$$