



# Update of QUALICOAT Specifications 2021 Update Sheet No. 02

applicable from 1 July 2021

**Subject:** Alignment of resistance to boiling water test with wet adhesion test

**Proposal/Request:** Pretreatment WG/2021-01-26 (item 5)

**Resolution No. 05/EC 2020-06-25**

The EC asked the Pretreatment WG to reconsider the alignment of the requirements of the wet adhesion test with those of the boiling water test

**QUALICOAT Resolution(s):**

**Resolution No. 1/TC 2021-06-09**

The TC ratified the following update sheets to become effective on 1 July 2021:

- SPEC 2021-US01 (Retesting chemical pretreatment systems from different production sites)
- SPEC 2021-US02 (Alignment of resistance to boiling water test with wet adhesion test)

**Amendment to the Specifications:**

- Section 2.16. Resistance to boiling water

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2

## 2.4 Adhesion

[...]

### 2.4.2 Wet adhesion

#### Boiling water

Immerse a sample in boiling demineralised water using method 1 or 2 as described in § 2.16. Remove the sample and allow it to cool down to room temperature. Carry out the test as detailed in § 2.4.1. The cross-hatch shall be made after one hour but within two hours.

#### REQUIREMENTS:

On visual inspection, there shall be no sign of detachment or blistering. Colour change is acceptable.

## 2.16. Resistance to boiling water

#### Method 1 with boiling water:

2 hours immersion in boiling demineralised water (maximum 10 µS at 20°C). Remove the test sample and allow it to cool down to room temperature. Apply an adhesive tape (see § 2.4) to the surface, ensuring that no air is trapped. After one minute, remove the tape at an angle of 45° with a sharp even pull.

#### Method 2 with a pressure cooker: (to be used for powder and electrophoretic coatings only)

Add demineralised water (maximum 10 µS at 20°C) to a pressure cooker with an internal diameter of about 200 mm to a depth of 25 mm and place a test panel measuring 50 mm in it.

Place the lid in position and heat the pressure cooker until steam escapes from the valve. The weighted needle valve shall be adjusted to produce an internal pressure of 100 +/- 10 kPA (1 bar). Continue heating for 1 hour, timing from the moment when steam first escapes from the valve. Cool the pressure cooker, remove the sample and allow it to cool down to room temperature.

Apply an adhesive tape (see § 2.4) to the surface, ensuring that no air is trapped. After one minute, remove the tape at any angle of 45° with a sharp even pull.

#### REQUIREMENTS:

~~No blistering in excess of 2 (S2) according to ISO 4628-2. There shall not be any defects or detachment.~~ On visual inspection, there shall be no sign of detachment or blistering. Colour change is acceptable.