

# Test Report

EN 927-5

Report No.: 214938-293



**DANISH  
TECHNOLOGICAL  
INSTITUTE**

Gregersensvej  
DK-2630 Taastrup  
Tel. +45 72 20 20 00  
Fax +45 72 20 20 19

info@teknologisk.dk  
www.teknologisk.dk

**Assignor:** Teknos A/S  
Industrivej 19  
DK-6580 Vamdrup  
Denmark

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**Material:** The test specimens were treated according to assignor's directions:  
TEKNOL AQUA 1415-01. Dipping 150 (135-165) g/m<sup>2</sup>  
ANTISTAIN AQUA 2901-63. Dipping 125 (113-138) g/m<sup>2</sup>  
ANTISTAIN AQUA 2901-63. Dipping 85 (77-94) g/m<sup>2</sup>  
AQUATOP VIRTIA BASE 1. Spraying 360 (324-396) g/m<sup>2</sup>

**Sampling:** The test material was sampled by the client and received at the Danish Technological Institute on 14-12-2023.

**Method:** EN 927: Paints and varnishes - Coating materials and coating systems for exterior wood Part 5:2006. Assessment of the liquid water permeability.

**Period:** The testing was carried out from 31-01-2024 to 28-06-2024  
Water permeability test took place from 25-06-2024 to 28-06-2024

| Test Panels:                              | Average (min-max) |                   |
|-------------------------------------------|-------------------|-------------------|
| Wood density (12% MC)                     | 408 (404-415)     | kg/m <sup>3</sup> |
| TEKNOL AQUA 1415-01                       | 145 (136-149)     | g/m <sup>2</sup>  |
| ANTISTAIN AQUA 2901-63                    | 120 (118-122)     | g/m <sup>2</sup>  |
| ANTISTAIN AQUA 2901-63                    | 90 (88-92)        | g/m <sup>2</sup>  |
| AQUATOP VIRTIA BASE 1                     | 338 (324-356)     | g/m <sup>2</sup>  |
| Dry film thickness                        | 108 (90-125)      | µm                |
| Water absorption after 72 hours           | 102 (99-105)      | g/m <sup>2</sup>  |
| - standard deviation                      | 2                 | g/m <sup>2</sup>  |
| - coefficient of variation                | 2                 | %                 |
| <b>Reference panels (test of sealer):</b> |                   |                   |
| Wood density (12% MC)                     | 468 (455-480)     | kg/m <sup>3</sup> |
| Water absorption after 72 hours           | 11 (9-12)         | g/m <sup>2</sup>  |

**Assessment:** According to EN 927-2:2022. Part 2: Performance specification. The tested system performs as 'Stable' regarding water absorption ( $\leq 175$  g/m<sup>2</sup>).

**Validity:** Water absorption after 72 hours on reference specimens was  $\leq 30$  g/m<sup>2</sup>. The test is valid.

**Terms:** This test was conducted accredited in accordance with international requirements ISO/IEC 17025:2017 and in accordance with the General Terms and Conditions of Danish Technological Institute. The test results solely apply to the tested item. This test report may be quoted in extract only if Danish Technological Institute has granted its written consent.  
This document is only valid with a digital signature from Danish Technological Institute. The date of issue appears from the digital signature Approved and signed by:

Berit Lindegaard  
Mobil: +45 7220 2314  
E-mail: [bkv@dti.dk](mailto:bkv@dti.dk)  
Test responsible

Jonas Stenbæk  
Mobil: +45 7220 1139  
E-mail: [jos@dti.dk](mailto:jos@dti.dk)  
Co-responsible

  
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TEKNOLOGISK INSTITUT



## Detailed results

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**Substrate:** Norway spruce (*Picea abies* (L.) Karst.).

**Material specification:** TEKNOLOG AQUA 1415-01 . SKU: 2579931 Lot: 400345-301.  
ANTISTAIN AQUA 2901-63. SKU: 10000324 Lot: 399398-301.  
AQUATOP VIRTUA BASE 1. SKU: 10003122 Lot: 406533-301.

| Treatment: | Coat | Trade name             | Type         | Application method and date | Recommended amount [g/m <sup>2</sup> ] |
|------------|------|------------------------|--------------|-----------------------------|----------------------------------------|
|            | 1    | TEKNOL AQUA 1415-01    | Impregnation | Dipping<br>14-02-2024       | 135-165                                |
|            | 2    | ANTISTAIN AQUA 2901-63 | Intermediate | Dipping<br>23-04-2024       | 113-138                                |
|            | 3    | ANTISTAIN AQUA 2901-63 | Intermediate | Dipping<br>25-04-2024       | 77-94                                  |
|            | 4    | AQUATOP VIRTUA BASE 1  | Topcoat      | Spraying<br>03-05-2024      | 324-396                                |

## Results:

| Test panels                       |                            |     |                           |     |                             |     |         |
|-----------------------------------|----------------------------|-----|---------------------------|-----|-----------------------------|-----|---------|
| Panel no.                         | 4201                       |     | 4202                      |     | 4203                        |     | Average |
| Density [kg/m³]                   | 404                        |     | 405                       |     | 415                         |     | 408     |
| Application data                  |                            |     |                           |     |                             |     |         |
| Coat 1 [g/m²]                     | 149                        |     | 149                       |     | 136                         |     | 145     |
| Coat 2 [g/m²]                     | 120                        |     | 122                       |     | 118                         |     | 120     |
| Coat 3 [g/m²]                     | 92                         |     | 88                        |     | 92                          |     | 90      |
| Coat 4 [g/m²]                     | 332                        |     | 324                       |     | 356                         |     | 338     |
| Dry film thickness                |                            |     |                           |     |                             |     |         |
| Thickness [µm]                    | 95 / 105 / 110 / 115 / 120 |     | 90 / 95 / 100 / 105 / 100 |     | 105 / 120 / 120 / 120 / 125 |     | 108     |
| Std.dev. [µm]                     | 10                         |     | 6                         |     | 8                           |     | 11      |
| Water absorption                  |                            |     |                           |     |                             |     |         |
| Panel part                        | A                          | B   | A                         | B   | A                           | B   | Average |
| Absorption [g/m²]                 | 102                        | 101 | 105                       | 100 | 99                          | 103 | 102     |
| Std.dev. [g/m²]                   | 2                          |     |                           |     |                             |     |         |
| COV [%]                           | 2                          |     |                           |     |                             |     |         |
| Reference panels (test of sealer) |                            |     |                           |     |                             |     |         |
| Panel no.                         | R101                       |     | R102                      |     | R103                        |     | Average |
| Density [kg/m³]                   | 469                        |     | 455                       |     | 480                         |     | 468     |
| Water absorption                  |                            |     |                           |     |                             |     |         |
|                                   | A                          | B   | A                         | B   | A                           | B   | Average |
| Absorption [g/m²]                 | 10                         | 9   | 11                        | 10  | 12                          | 11  | 11      |
| Std.dev. [g/m²]                   | 1                          |     |                           |     |                             |     |         |
| COV [%]                           | 9                          |     |                           |     |                             |     |         |