

# Test Report

EN 927-5

Report No.: 214938-331



**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  
Page 1 of 1  
bkv/jos/hbs  
Order no.: 214938  
No. of appendices: 1

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

**Material:** The test specimens were treated according to assignor's directions:  
TEKNOL AQUA 1410-01. Dipping 95 (80-110) g/m<sup>2</sup>  
AQUAPRIMER 2900-02 - TST 615329015 Nut. Dipping 50 (45-55) g/m<sup>2</sup>  
2 x AQUATOP VIRTIA BASE T - TST 660319015 Nut (AQUATOP 2600-24 - BASE T).  
Spraying 175 (158-193) 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)                                                | 446 (407-485)     | kg/m <sup>3</sup> |
| TEKNOL AQUA 1410-01                                                  | 90 (81-108)       | g/m <sup>2</sup>  |
| AQUAPRIMER 2900-02 - TST 615329015 Nut                               | 51 (49-52)        | g/m <sup>2</sup>  |
| AQUATOP VIRTIA BASE T - TST 660319015 Nut (AQUATOP 2600-24 - BASE T) | 171 (160-191)     | g/m <sup>2</sup>  |
| AQUATOP VIRTIA BASE T - TST 660319015 Nut (AQUATOP 2600-24 - BASE T) | 166 (158-176)     | g/m <sup>2</sup>  |
| Dry film thickness                                                   | 118 (90-140)      | µm                |
| Water absorption after 72 hours                                      | 114 (109-119)     | g/m <sup>2</sup>  |
| - standard deviation                                                 | 4                 | g/m <sup>2</sup>  |
| - coefficient of variation                                           | 4                 | %                 |
| <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                                   | Jonas Stenbæk                                      |
| Mobil: +45 7220 2314                               | Mobil: +45 7220 1139                               |
| E-mail: <a href="mailto:bkv@dti.dk">bkv@dti.dk</a> | E-mail: <a href="mailto:jos@dti.dk">jos@dti.dk</a> |
| Test responsible                                   | Co-responsible                                     |



DIGITALT SIGNERET DOKUMENT

11. juli 2024

TEKNOLOGISK INSTITUT



## Detailed results

Order no.: 214938  
Appendix: 1  
Page: 1 of 1  
Initials: bkv/jos/hbs

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

**Material specification:** TEKNOL AQUA 1410-01. SKU: 1711455.  
AQUAPRIMER 2900-02 - TST 615329015 Nut. SKU: 1944723 Lot: 401516-301.  
AQUATOP VIRTIA BASE T - TST 660319015 Nut (AQUATOP 2600-24 - BASE T). SKU: 2324418 Lot: 401578-201.

| Treatment: | Coat | Trade name                                                           | Type         | Application method and date | Recommended amount [g/m <sup>2</sup> ] |
|------------|------|----------------------------------------------------------------------|--------------|-----------------------------|----------------------------------------|
|            | 1    | TEKNOL AQUA 1410-01                                                  | Impregnation | Dipping<br>05-02-2024       | 80-110                                 |
|            | 2    | AQUAPRIMER 2900-02 - TST 615329015 Nut                               | Primer       | Dipping<br>26-04-2024       | 45-55                                  |
|            | 3    | AQUATOP VIRTIA BASE T - TST 660319015 Nut (AQUATOP 2600-24 - BASE T) | Topcoat      | Spraying<br>06-05-2024      | 158-193                                |
|            | 4    | AQUATOP VIRTIA BASE T - TST 660319015 Nut (AQUATOP 2600-24 - BASE T) | Topcoat      | Spraying<br>07-05-2024      | 158-193                                |

## Results:

| Test panels                       |                                   |     |                              |     |                                   |     |         |
|-----------------------------------|-----------------------------------|-----|------------------------------|-----|-----------------------------------|-----|---------|
| Panel no.                         | 10401                             |     | 10402                        |     | 10403                             |     | Average |
| Density [kg/m³]                   | 407                               |     | 485                          |     | 446                               |     | 446     |
| Application data                  |                                   |     |                              |     |                                   |     |         |
| Coat 1 [g/m²]                     | 108                               |     | 81                           |     | 81                                |     | 90      |
| Coat 2 [g/m²]                     | 52                                |     | 52                           |     | 49                                |     | 51      |
| Coat 3 [g/m²]                     | 191                               |     | 163                          |     | 160                               |     | 171     |
| Coat 4 [g/m²]                     | 176                               |     | 158                          |     | 163                               |     | 166     |
| Dry film thickness                |                                   |     |                              |     |                                   |     |         |
| Thickness [µm]                    | 120 / 115 /<br>120 / 140 /<br>115 |     | 125 / 125 /<br>110 / 95 / 90 |     | 105 / 130 /<br>120 / 130 /<br>125 |     | 118     |
| Std.dev. [µm]                     | 10                                |     | 16                           |     | 10                                |     | 13      |
| Water absorption                  |                                   |     |                              |     |                                   |     |         |
| Panel part                        | A                                 | B   | A                            | B   | A                                 | B   | Average |
| Absorption [g/m²]                 | 109                               | 112 | 113                          | 117 | 119                               | 116 | 114     |
| Std.dev. [g/m²]                   | 4                                 |     |                              |     |                                   |     |         |
| COV [%]                           | 4                                 |     |                              |     |                                   |     |         |
| 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                                 |     |                              |     |                                   |     |         |