



INNOVATIVE SOLUTIONS FOR CRITICAL ENVIRONMENTS

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## CERTIFICATE OF ANALYSIS

|                              |                 |
|------------------------------|-----------------|
| <b>Part Number:</b>          | VTPNWLS-99      |
| <b>Product Type:</b>         | Polyester Wiper |
| <b>Edge Treatment:</b>       | Laser Sealed    |
| <b>Lot Number:</b>           | 231211-100842   |
| <b>Sample Received Date:</b> | 12-17-2023      |
| <b>Manufacturing Date:</b>   | 12-11-2023      |
| <b>Test Date:</b>            | 01-15-2023      |

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### Physical Properties

| Test                | Method       | Specification                | Actual    | Result |
|---------------------|--------------|------------------------------|-----------|--------|
| <b>Dimensions</b>   | Tape Measure | 9" x 9" ( $\pm 0.5"$ )       | 9.0 x 9.0 | Pass   |
| <b>Basic Weight</b> | TAPPI T-410  | 135 $\pm$ 5 g/m <sup>2</sup> | 138       | Pass   |

### Absorbency

| Test                       | Method          | Specification              | Actual | Result |
|----------------------------|-----------------|----------------------------|--------|--------|
| <b>Sorptive Efficiency</b> | IENT-RP.CC004.3 | Min. 2 ml/g                | 2.2    | Pass   |
| <b>Sorptive Capacity</b>   | IENT-RP.CC004.3 | Min. 310 ml/m <sup>2</sup> | 362    | Pass   |
| <b>Sorptive Rate</b>       | IENT-RP.CC004.3 | < 1 sec                    | 0.5    | Pass   |

### Cleanliness

| Test                                          | Method          | Specification                                   | Actual | Result |
|-----------------------------------------------|-----------------|-------------------------------------------------|--------|--------|
| <b>LPC (<math>\geq 0.5\mu\text{m}</math>)</b> | IENT-RP.CC004.3 | < 10 x 10 <sup>6</sup> particles/m <sup>2</sup> | 8.12   | Pass   |
| <b>TNVR - IPA</b>                             | IENT-RP.CC004.3 | Max. 0.1 g/m <sup>2</sup>                       | 0.070  | Pass   |
| <b>TNVR – DI H2O</b>                          | IENT-RP.CC004.3 | Max. 0.02 g/m <sup>2</sup>                      | 0.007  | Pass   |

## Extractables

Test Method: IEST-RP.CC004.3

| Ions      | Specification | Actual | Result |
|-----------|---------------|--------|--------|
| Sodium    | Max. 0.2 ppm  | 0.195  | Pass   |
| Potassium | Max. 0.2 ppm  | 0.020  | Pass   |
| Calcium   | Max. 0.5 ppm  | 0.018  | Pass   |
| Magnesium | Max. 0.2 ppm  | 0.035  | Pass   |
| Ammonium  | Max. 0.3 ppm  | 0.033  | Pass   |
| Nitrate   | Max. 0.3 ppm  | 0.079  | Pass   |
| Fluoride  | Max. 0.2 ppm  | 0.097  | Pass   |
| Nitrite   | Max. 0.2 ppm  | ND     | Pass   |
| Bromide   | Max. 0.2 ppm  | ND     | Pass   |
| Phosphate | Max. 0.3 ppm  | ND     | Pass   |
| Chloride  | Max. 0.2 ppm  | 0.036  | Pass   |
| Sulphate  | Max. 0.2 ppm  | 0.008  | Pass   |

## Fourier Transform Infra-Red Test

| FTIR                  | Method          | Specification | Actual | Result |
|-----------------------|-----------------|---------------|--------|--------|
| Silicone, Amide & DOP | IEST-RP.CC004-3 | Absent        | Absent | Pass   |

Notes:



Tested by:  
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Approved by:  
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