

NAFIGATE Park s.r.o. Prosek Point, Building A, Prosecká 851/64 190 00 Prague 9, Czech Republic Provozovna: Andělohorská 419, Chrastava 26 IČ: 08555001 Web: www.nafigatepark.cz

## Technical data sheet

## N-composite roll FFP3 Basic

| PRODUCT IDENTIFICATION AND USE |   |  |  |  |
|--------------------------------|---|--|--|--|
| MANUFACTURER:                  | NAFIGATE Park s.r.o., Prosecká 851/64, 190 00 Praha 9<br>IČ: 08555001, data box ID: 6fdd7p4<br>www.nafigatepark.cz, info@nafigatepark.cz  |  |  |  |
| PRODUCT IDENTIFIER:            | N-composite roll FFP3 Basic   |  |  |  |
| PRODUCT CODE:                  | NCRB3   |  |  |  |
| COLOUR:                        | white   |  |  |  |
| PRODUCT USE:                   | nanofibrous composite media optimized for the production of PPE (respirators) classified as FFP3 according to EN149:2001+A1:2009 standard   |  |  |  |
| PRODUCT<br>DESCRIPTION:        | The nanofibrous composite is a multi-layer laminate consisting of non-woven polypropylene fabrics and a nanofiber layer of PVDF (polyvinylidene fluoride) polymer produced using Nanospider™ technology. Thanks to the lamination process, the nanofiber membrane is sufficiently fixed, which on the one hand guarantees good final mechanical properties of the final product and at the same time protects the layer from damage during normal handling and use. |  |  |  |
| PRODUCT STRUCTURE:             | polypropylene spunbond / polypropylene meltblown / polyvinylidene fluoride (PVDF)<br>nanofibers / polyethylene adhesive / polypropylene spunbond  |  |  |  |
| MAJOR BENEFITS:                | <ul> <li>Ultra-high efficiency for particles the size of the COVID-19 virus (80-120 nm)</li> <li>Optimized for FFP3 class according to EN149:2001+A1:2009 standard</li> <li>The highest comfort: significantly higher breathability than required by the standard</li> <li>Stability: no reduction in filtration efficiency due to spontaneous discharge</li> <li>Possible to be washed and disinfected (according to recommended procedures)</li> </ul>            |  |  |  |

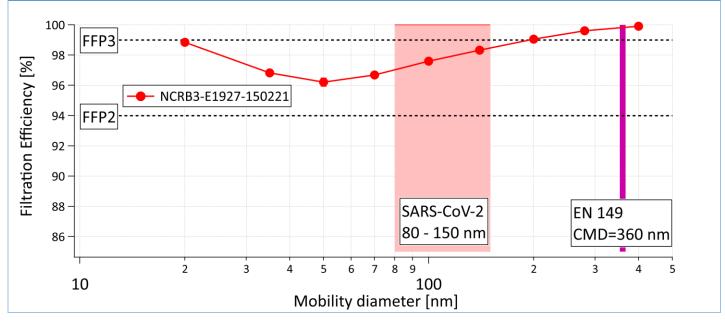
| PRODUCT PROPERTIES  |                  |                            |  |  |  |
|---|------------------|----------------------------|--|--|--|
| Parameter   | Unit             | Value <sup>(5)</sup>       | FFP3 requirement                             |  |  |
|   |                  |                            | according to EN 149                          |  |  |
| Basis weight  | (g/m²)           | 67 ± 1                     | NA   |  |  |
| Nanofiber diameter  | (nm)             | 100 ± 20                   | NA   |  |  |
| Filtration Efficiency for PS 278,8 - 399.5 nm             | (%) @ 95 l/min   | > 99,1 <sup>(3)(6)</sup>   | ≥ 99,0 (1)                                   |  |  |
| Filtration Efficiency for PS 94,7-117,6 nm <sup>(4)</sup> | (%) @ 95 l/min   | > 94,8 <sup>(3)(6)</sup>   | Not required                                 |  |  |
| Initial penetration of NaCl aerosol                       | (%) @ 95 l/min   | NA                         | < 1,0 <sup>(1)</sup>                         |  |  |
| Initial penetration of paraffin oil                       | (%) @ 95 l/min   | < 0,5 (2)                  | < 1,0 <sup>(1)</sup>                         |  |  |
| Initial pressure drop                                     | (Pa) @ 30 l/min  | < <b>52</b> <sup>(2)</sup> | < 100 (Inhalation resistance) <sup>(1)</sup> |  |  |
| Initial pressure drop                                     | (Pa) @ 95 l/min  | < 194 (2)(3)(6)            | < 300 (Inhalation resistance) <sup>(1)</sup> |  |  |
| Initial pressure drop                                     | (Pa) @ 160 l/min | < 198 <sup>(3)</sup>       | < 300 (Exhalation resistance) <sup>(1)</sup> |  |  |

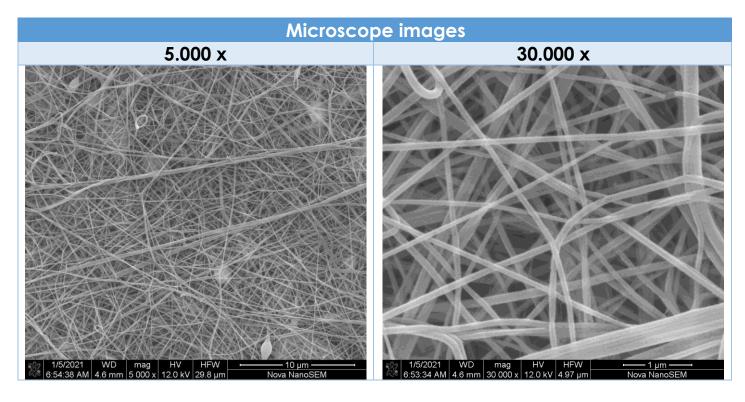
| Delivery units and Storage conditions |   |   |   |  |  |  |
|---------------------------------------|---|---|---|--|--|--|
| UNITS:                                | Roll on Europallet                            | 2. Can be delivered either in full total roll   | width, or sliced on request                                   |  |  |  |
| SIZE:                                 | Roll width:<br>Roll length:<br>Core diameter: | Total 113 cm<br>max. 730±20 lin. m (or shorter on reques<br>outer diameter of max. Roll: 61-62 cm<br>76 mm (3") | Effective: 105 cm<br>t)<br>weight of max. Roll: approx. 55 kg |  |  |  |
| STORAGE:                              |   | kaging, storage life is 24 months, at temp<br>ot store in the direct sunlight                                   | peratures of 10-30 ° C and humidity                           |  |  |  |



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## Size resolved filtration efficiency at face velocity 10.6 cm/s <sup>(6)</sup>





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(1) according to requirements of EN 149:2001+A1:2009 standard

(2) according to test report No. 053/2021 – Accredited Testing Laboratory No. 1040 – VUBP Prague

(3) according to test report No. 11-02/21–Testing Laboratory– VUT Brno

(4) corresponds approx. to the particle size of the SARS-CoV-2 virus (responsible for COVID-19 disease)

(5) measurements without any pre-conditioning

(6) according to Measurement report No. 210306/01-ICPF CAS, Laboratory of Aerosol Chemistry and Physics, Prague

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