

# Material Specification

## Nomex



**MATERIAL:** Nomex material is woven by KE Fibertec Væveri (weaving mill) using NM 60/2 yarns. The Nomex fibre is well-known for its flame resistant properties meaning that it will neither melt, drip nor combust in air. The Nomex material of KE Fibertec is woven in a twill weave using staple fibres to ensure largest possible textile surface and uniform air permeability.

**CONSTRUCTION:** Heatset, shrinkage- and permeability-stabilized material.

| Type<br>KE-Datasheet                           |   | NO130<br>33         | NO290<br>16         | NO375<br>17         | NO460<br>18         | NO700<br>19         | Standard                     |
|--|---|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------------|
| <b>Weight<br/>(%) -/+5</b>                     | <b>g/m<sup>2</sup></b>  | 298                 | 250                 | 230                 | 220                 | 210                 | EN-ISO 5077                  |
| <b>Thickness<br/>(%) -/+10</b>                 | <b>mm</b>   | 0.44                | 0.55                | 0.57                | 0.55                | 0.5                 | EN-ISO 12127:1997            |
| <b>Permeability</b>                            | <b>m<sup>3</sup>/m<sup>2</sup>/h<br/>120 Pa<br/>Tolerance<br/>(%)</b> | 130                 | 290                 | 375                 | 460                 | 700                 | EN ISO<br>9237:1995          |
|  |   | -9/+9               | -14/+14             | -9/+9               | -8/+8               | -5/+5               |                              |
| <b>Tensile strength<br/>(%) -/+10</b>          | <b>Warp / Weft<br/>N/50 mm</b>  | >1300 / 1400        | 1600 / 1300         | 1600 / 1100         | 1600 / 1100         | 1700 / 880          | EN-ISO<br>13934-1            |
| <b>Resistance to<br/>tearing<br/>(%) -/+10</b> | <b>Warp / Weft<br/>N</b>  | 170 / 170           | 120 / 110           | 120 / 120           | 140 / 100           | 150 / 140           | EN-ISO<br>13937:2            |
| <b>*Filter class</b>                           |   | N/A                 | N/A                 | N/A                 | N/A                 | N/A                 | EN 779:2012                  |
| <b>**Shrinkage<br/>in wash</b>                 | <b>(%)<br/>40°C</b>   | -                   | -                   | -                   | -                   | -                   | EN-ISO 5077                  |
| <b>Melting point</b>                           | <b>°C</b>   | 371                 | 371                 | 371                 | 371                 | 371                 |                              |
| <b>Operating<br/>temperature</b>               | <b>°C</b>   | 100/-45             | 100/-45             | 100/-45             | 100/-45             | 100/-45             |                              |
| <b>Spontaneous<br/>ignition temp.</b>          | <b>°C</b>   | -                   | -                   | -                   | -                   | -                   |                              |
| <b>Water absorption</b>                        | <b>(%) at<br/>90% RF</b>  | 5                   | 5                   | 5                   | 5                   | 5                   |                              |
| <b>Electrostatic<br/>resistance</b>            | <b>Ohm/cm</b>   | 3 x 10 <sup>8</sup> | 3 x 10 <sup>8</sup> | 3 x 10 <sup>8</sup> | 3 x 10 <sup>8</sup> | 3 x 10 <sup>8</sup> | DIN 54345                    |
| <b>Clean room<br/>classification</b>           |   | N/A                 | N/A                 | N/A                 | N/A                 | N/A                 | ISO-14644-1                  |
| <b>Fire resistance</b>                         |   | B-S1-d0<br>N/A      | B-S1-d0<br>N/A      | B-S1-d0<br>N/A      | B-S1-d0<br>N/A      | B-S1-d0<br>N/A      | EN-13501<br>UL 723/NFPA 90 A |
| <b>Oeko-Tex®</b>                               |   | Approved            | Approved            | Approved            | Approved            | Approved            | Standard 100                 |
| <b>Cradle to Cradle®</b>                       |   | N/A                 | N/A                 | N/A                 | N/A                 | N/A                 |                              |

\*KE measurement \*\*Washed and dried according to KE Fibertec instructions

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