Sound Permeable Waterproof Film

Functional film with stable air/sound permeability and waterproof property, achieves waterproof ratings of IPX7 and IPX8 for mobile device cases.

### Structure & Features

- **Vacancy structure of soft porous film** (Vacancy size: 15-30μm)
- **Highly waterproof**
  - Provides IPX7/8 waterproof level for mobile device cases
- **Highly sound permeable**
  - Available in 2 grades
- **Environment friendly**
  - Complies with RoHS and REACH

### Performance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>M3K30NW</th>
<th>M3K3001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film thickness</td>
<td>μm</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Water resistance</td>
<td>kPa</td>
<td>50</td>
<td>80</td>
</tr>
<tr>
<td>Air permeability</td>
<td>sec/100cm²</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Strength at break</td>
<td>N/inc</td>
<td>2.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>%</td>
<td>250</td>
<td>64</td>
</tr>
<tr>
<td>100% modulus</td>
<td>N/inc</td>
<td>1.0</td>
<td>Broken</td>
</tr>
<tr>
<td>10% modulus</td>
<td>N/inc</td>
<td>0.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Adhesion to waterproof tape</td>
<td>N/inc</td>
<td>Film broken</td>
<td>Film broken</td>
</tr>
</tbody>
</table>

Water resistance: Pursuant to JIS L 1092 Test Method for Water Resistance of Textiles (Hydrostatic Pressure Test), Method B (High Water Pressure) ※ Using mesh cover
Air permeability: Pursuant to JIS L 1096, Method B (Gurley Test Method) (equivalent to JIS P 8117, Method B)

The sound permeability of the film was measured by the method specially developed by Seiren for the measurement of the parameter with an sample opening of 1.2mm×2.0mm. (The measurement was made under an open system where the film underwent increased sound permeation loss in the low frequency range due to sound diffusion.)

※ The figures given for the parameters of the film in the table are their respective measured values, not their guaranteed values.

### Applications

Can be used as sound permeable waterproof film or internal/external pressure control filters of:

- Mobile phones
- Smart phones
- Digital cameras

---

Seiren’s Newly Developed Product

Umeda Daibiru., 14F 3-3-10 Umeda, Kita-ku, Osaka 530-0001 Japan
WWW URL http://www.seiren.com/seiren
E-mail: conductive-fabric@seiren.com

Sep. 2016