SCF (Super Clean Foam)

SCF400/SCF401/SCF402/SCF403/SCF404/SCF406/SCF408/SCF450

Outline

SCF400 series are polypropylene foam materials with or without adhesive, which can be used as dust-proof, buffer, shock absorber, and light shield materials. Their application is mainly for display gasket of electric appliances, communication equipments and other electronic equipments.

Construction

♦ SCF400
   - Polypropylene foam

♦ SCF401
   - Liner
   - Acrylic adhesive (Backing: PET #50)
   - Polypropylene foam

♦ SCF402
   - Liner
   - Acrylic adhesive (Backing: PET #25)
   - Polypropylene foam

♦ SCF403
   - Liner
   - Acrylic adhesive (Backing: PET #100)
   - Polypropylene foam

♦ SCF404
   - Liner
   - Acrylic adhesive (Backing: Nonwoven cloth)
   - Polypropylene foam

♦ SCF406
   - Liner
   - Acrylic adhesive (Backing: PET #4)
   - Polypropylene foam

♦ SCF408
   - Liner
   - Acrylic adhesive (Backing: PET #12)
   - Polypropylene foam

♦ SCF450
   - PET #50 (Black)
   - Acrylic adhesive
   - Polypropylene foam

Notes: This data represents examples of measured values, and not guaranteed values. They do not guarantee compatibility with the applications described in these documents. Please confirm compatibility with your application prior to use. We retain all rights, including copyrights, for the contents of these documents. Copying, reprinting and use for purposes other than originally intended are strictly prohibited without our prior expressed permission. Contact details are provided at the end of this document. Please do not hesitate to contact us for any inquiry.
Features

- The environment impact material is not used.
- They have thin thickness (0.3mm~), easy to use in narrow space.
- Thanks to their low compression stress, they will not deform the structures after application.
- They show excellent conformability to gaps with bumps or curved surfaces.
- They have almost no impurities, which might contaminate the equipments.
- Due to the stiffness secured by their unique micro-cell structure, they show excellent process ability and workability.

Application

- Electric appliances, electronic equipments: Dust-proof display gasket and lens buffer for digital camera and digital video recorder.
- Communication equipment: Dust-proof display gasket and camera lens buffer for mobile phone.

Standard Size

<table>
<thead>
<tr>
<th>Thickness (mm)</th>
<th>Width (mm)</th>
<th>Length (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3 ~ 0.4</td>
<td>500</td>
<td>100</td>
</tr>
</tbody>
</table>

only SCF406 : 480

*The thickness is only foam’s thickness; the combined should add the thickness of each adhesive tape.

*For other sizes, please contact us.

Properties

Properties of Foam

(1) General Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Values</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>g/cm³</td>
<td>0.045</td>
<td>JIS K 6767</td>
</tr>
<tr>
<td>50% Compression Load</td>
<td>N/cm²</td>
<td>1.4</td>
<td></td>
</tr>
</tbody>
</table>
(2) Compression Ratio vs. Compression Load

![Graph showing Compression Ratio vs. Compression Load]

(3) Outgassing

◊ Result of analysis of generated organic gases

<table>
<thead>
<tr>
<th>Table -3</th>
<th>Unit</th>
<th>Toluene</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°C x 60min</td>
<td>ng/cm²</td>
<td>&lt;0.28</td>
<td>0.80</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Toluene conversion value

◊ Result of analysis of generated inorganic gases

<table>
<thead>
<tr>
<th>Table -4</th>
<th>Unit</th>
<th>Cl⁻</th>
<th>NO₂⁻</th>
<th>NO₃⁻</th>
<th>PO₄³⁻</th>
<th>SO₄²⁻</th>
<th>NH₄⁺</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°C x 60min</td>
<td>ng/cm²</td>
<td>&lt;13</td>
<td>&lt;13</td>
<td>&lt;13</td>
<td>&lt;13</td>
<td>&lt;13</td>
<td>24</td>
</tr>
</tbody>
</table>

◊ Result of analysis of hot water extraction ion components

<table>
<thead>
<tr>
<th>Table -5</th>
<th>Unit</th>
<th>Cl⁻</th>
<th>NO₂⁻</th>
<th>NO₃⁻</th>
<th>PO₄³⁻</th>
<th>SO₄²⁻</th>
<th>NH₄⁺</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°C x 120min</td>
<td>ng/cm²</td>
<td>70</td>
<td>&lt;5.0</td>
<td>&lt;5.0</td>
<td>&lt;5.0</td>
<td>&lt;5.0</td>
<td>7.1</td>
</tr>
</tbody>
</table>

*< : Under the limit of detection

● Properties of Adhesive

<table>
<thead>
<tr>
<th>Table -6</th>
<th>Item</th>
<th>Unit</th>
<th>Substrate</th>
<th>Adhesive strength (90° peeling)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCF401</td>
<td>N/20mm</td>
<td>SUS304</td>
<td>8.16</td>
</tr>
<tr>
<td></td>
<td>SCF402</td>
<td></td>
<td></td>
<td>6.50</td>
</tr>
<tr>
<td></td>
<td>SCF403</td>
<td></td>
<td></td>
<td>8.63</td>
</tr>
<tr>
<td></td>
<td>SCF404</td>
<td></td>
<td></td>
<td>11.12</td>
</tr>
<tr>
<td></td>
<td>SCF406</td>
<td></td>
<td></td>
<td>5.77</td>
</tr>
<tr>
<td></td>
<td>SCF408</td>
<td></td>
<td></td>
<td>5.55</td>
</tr>
</tbody>
</table>
Precautions

- Place the products longitudinally to avoid deformation.
- Keep the products away from high temperatures and humidity, and store them in a dark cool place avoiding direct sunlight.
- As the adhesive is pressure-sensitive, attention should be paid to the lamination pressure.
- You should perform the test yourself to make sure the product is capable of the application.