

TECHNICAL DATA SHEET

Softlon® OPC

Description:

Softlon® OPC is a physically crosslinked polyolefin foam with superior softness and sound absorption properties. The foam is free of heavy metals, PVC, plasticisers and CFCs. Softlon® OPC is compliant with the requirements of the EU Directive 2011/65/EU, commonly known as the Restriction of Hazardous Substances (RoHS) directive.

| Property | Test Method | Units | Typical Value | | |
|------------------------------------|-------------|--------------------|---------------|------|-------|
| Grade | | | 2000 | 3000 | 4000 |
| Density | Internal | kg/m ³ | 50 | 33 | 25 |
| Tensile Strength | JIS K6767 | | | | |
| Longitudinal | | kg/cm ² | 6.5 | 3.8 | 3.3 |
| Crosswise | | kg/cm ² | 3.8 | 2.1 | 1.7 |
| Elongation | JIS K6767 | | | | |
| Longitudinal | | % | 290 | 190 | 130 |
| Crosswise | | % | 240 | 160 | 110 |
| Tear Strength | JIS K6767 | | | | |
| Longitudinal | | kg/cm | 4.0 | 2.2 | 1.8 |
| Crosswise | | kg/cm | 3.3 | 1.5 | 1.0 |
| Compression Strength | Internal | | | | |
| 25% deflection | | kg/cm ² | 0.26 | 0.07 | 0.01 |
| 50% deflection | | kg/cm ² | 0.71 | 0.26 | 0.02 |
| 70% deflection | | kg/cm ² | 2.29 | 0.92 | 0.05 |
| Compression Set | JIS K6767 | | | | |
| 25% deflection | | % set | 2.4 | 2.2 | 3.1 |
| Dimensional Change Heat | 70°C, 22h | | | | |
| Longitudinal | | -% | 0.57 | 0.75 | 0.68 |
| Crosswise | | -% | 2.66 | 1.71 | 2.63 |
| Noise Reduction Coefficient | ISO 354 | | | | |
| 6mm thickness | | [-] | - | 0.10 | 0.15 |
| 15mm thickness | | [-] | - | - | 0.45 |
| Working Temp Range | Internal | °C | -80 / +100 | | |
| Water Absorption | JIS K6767 | mg/cm ² | 0.14 | 0.31 | 2.07 |
| Thermal Conductivity | ASTM C518 | W/m.°K, 23°C | - | - | 0.034 |

Nomenclature:

The following table explains the nomenclature of Softlon® OPC physically crosslinked polyethylene foams.



Tolerances:

The following tables list tolerances for thickness, density and width of standard Softlon® OPC products made at Thai Sekisui Foam:

| Thickness | |
|--------------------------|------------------------------|
| Nominal Thickness | Tolerance¹ |
| 3mm | 2.6 – 3.4mm |
| 5mm | 4.5 – 5.6mm |
| 7mm | 6.2 – 8.0mm |
| 10mm | 9.0 – 11.5mm |
| 15mm | 14.0 – 17.0mm |

¹Other thicknesses and/or tolerances subject to confirmation. When unwinding the roll, especially for low density material, the foam near the core may be compressed due to its own weight. After allowing for relaxation, the foam will recover to original thickness.

| Density² (foam only) | |
|--|---------------------------------|
| Nominal Density | Tolerance |
| 25 kg/m ³ | 22.72 – 27.77 kg/m ³ |
| ² Applies to the foam core. | |

| Width³ (Sheet) | |
|--|------------------|
| Nominal Width | Tolerance |
| 1000mm | -0 / +20mm |
| ³ Other widths and/or tolerances subject to confirmation. | |

THAI SEKISUI FOAM

700/379 Moo 6, Amata Nakorn Industrial Estate
Tumbol Donhua-loh, Amphur Muang
Chonburi 20000 THAILAND

Tel: +66 3821 3219 ~ 26, Fax: +66 3821 3281

Email: info@thaisekisui.co.th, Web: www.thaisekisui.co.th



This information on Sekisui Foam International products is presented to the best of our knowledge. All product data is based on average values and is for guidance only. As these products are subject to constant research and development, we reserve the right to update the contents without notice.

Recommendations as to methods of post fabrication, application and use of Sekisui Foam International products are based on our experience and knowledge of the characteristics of our products and are given in good faith. As producer of the material we have no control over the application of Sekisui Foam International products and no legal responsibility is accepted for such recommendations. In particular, no responsibility is accepted by us for any system in which Sekisui Foam International products are utilised or for any application.

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