

## TECHNICAL DATA SHEET

### Softlon® OPC FR-ND 4000

#### Description:

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

Property	Typical Value	Test Method
Density	25 kg/m <sup>3</sup> (nominal)	Internal
Tensile Strength	3.3 kg/cm <sup>2</sup> (longitudinal) 1.7 kg/cm <sup>2</sup> (crosswise)	JIS K6767
Elongation	130% (longitudinal) 110% (crosswise)	JIS K6767
Tear Strength	1.8 kg/cm (longitudinal) 1.0 kg/cm (crosswise)	JIS K6767
Compression Strength	0.01 kg/cm <sup>2</sup> @ 25% deflection 0.02 kg/cm <sup>2</sup> @ 50% deflection 0.05 kg/cm <sup>2</sup> @ 75% deflection	Internal
Compression Set	3.1% @ 25% deflection	JIS K6767
Dimensional Change Heat	-0.68% (longitudinal) -2.63% (crosswise)	70°C, 22h
Working Temperature Range	-80 / +100 °C	Internal
Noise Reduction Coefficient	0.20 @ 7mm thickness 0.40 @ 10mm thickness	ISO 354
Thermal Conductivity	0.034 W/m/°K @ 23 °C mean temperature	ASTM C518
Flammability Properties	Pass Pass	UL94 (HF-1) FMVSS 302
Water Absorption	2.07 mg/cm <sup>2</sup>	JIS K6767
Water Vapour Permeability	1.7 x 10 <sup>-13</sup> kg/m/s/Pa	ASTM E96

#### Nomenclature:

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



**Tolerances:**

The following tables list tolerances for thickness, density and width of standard Softlon® OPC 4000 products made at Thai Sekisui Foam:

<b>Thickness</b>	
<b>Nominal Thickness</b>	<b>Tolerance<sup>1</sup></b>
3mm	2.6 – 3.4mm
5mm	4.5 – 5.6mm
8mm	7.2 – 9.0mm
10mm	9.0 – 11.5mm
15mm	14.0 – 17.0mm

<sup>1</sup>Other 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.

<b>Density<sup>2</sup> (foam only)</b>	
<b>Nominal Density</b>	<b>Tolerance</b>
25 kg/m <sup>3</sup>	22.72 – 27.77 kg/m <sup>3</sup>

<sup>2</sup>Applies to the foam core.

<b>Width<sup>3</sup> (Sheet)</b>	
<b>Nominal Width</b>	<b>Tolerance</b>
1000mm	-0 / +20mm

<sup>3</sup>Other widths and/or tolerances subject to confirmation.

**Appearance:**

Standard Softlon OPC products have a skin appearance that varies by thickness:

<b>Nominal Thickness</b>	<b>Appearance<sup>4</sup></b>
3, 5mm	Microperforated foam skin on one side
8, 10, 15mm	Microperforated foam skin on both sides

<sup>4</sup>Other skin appearances, including skived surface, are subject to confirmation. Physical properties detailed on Page 1 are not guaranteed for Softlon OPC with alternative skin surfaces to standard grades.

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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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