

## TECHNICAL DATA SHEET

### Softlon® FR-ND 3000

#### Description:

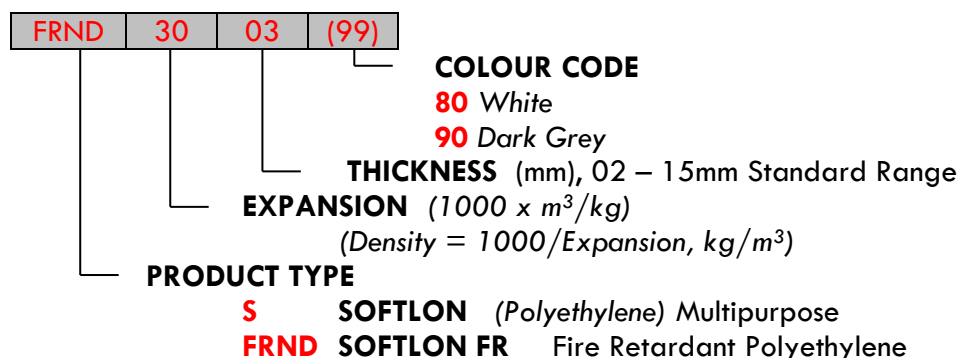
Softlon® FR-ND 3000 is a flexible closed cell, electron beam crosslinked, fire retardant polyolefin foam with a smooth outer skin. Due to the unique manufacturing process, Softlon® FR-ND 3000 exhibits consistent thickness and density, and possesses a fine cell structure.

The foam is free of heavy metals, PVC, plasticisers and CFCs. Softlon® FR-ND 3000 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	33 kg/m <sup>3</sup> (nominal)	Internal
Tensile Strength	4.0 kg/cm <sup>2</sup> (longitudinal) 2.2 kg/cm <sup>2</sup> (crosswise)	JIS K6767
Elongation	236% (longitudinal) 158% (crosswise)	JIS K6767
Tear Strength	2.1 kg/cm (longitudinal) 1.2 kg/cm (crosswise)	JIS K6767
Compression Strength	0.35 kg/cm <sup>2</sup> @ 25% 1.00 kg/cm <sup>2</sup> @ 50% 3.25 kg/cm <sup>2</sup> @ 75%	Internal
Compression Set	7.0% @ 25% deflection	JIS K6767
Dimensional Change Heat	-1.30% (longitudinal) -0.80% (crosswise)	70°C, 22h
Working Temperature Range	-80 / +100 °C	Internal
Thermal Conductivity	0.034 W/m/°K @ 23 °C mean temperature	ASTM C518
Flammability Properties	Pass	UL94 (HF-1)
Water Absorption	0.07 mg/cm <sup>2</sup>	JIS K6767
Water Vapour Permeability	7.3 x 10 <sup>-14</sup> kg/m/s/Pa	JIS Z0208

#### Nomenclature:

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



**Tolerances:**

The following tables list tolerances for thickness, density and width of standard Softlon® FR-ND 3000 products made at Thai Sekisui Foam:

<b>Thickness</b>	
<b>Nominal Thickness</b>	<b>Tolerance<sup>1</sup></b>
2mm	1.7 – 2.5mm
3mm	2.7 – 3.5mm
4mm	3.6 – 4.5mm
5mm	4.6 – 5.6mm
6mm	5.6 – 6.6mm
8mm	7.4 – 8.9mm
10mm	9.3 – 11.3mm
12mm	11.3 – 13.3mm
15mm	14.0 – 16.5mm

<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>
33 kg/m <sup>3</sup>	30.30 – 37.03 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
1200mm	
1500mm	

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

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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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