

TECHNICAL DATA SHEET

Softlon® FR-ND 4000

Description:

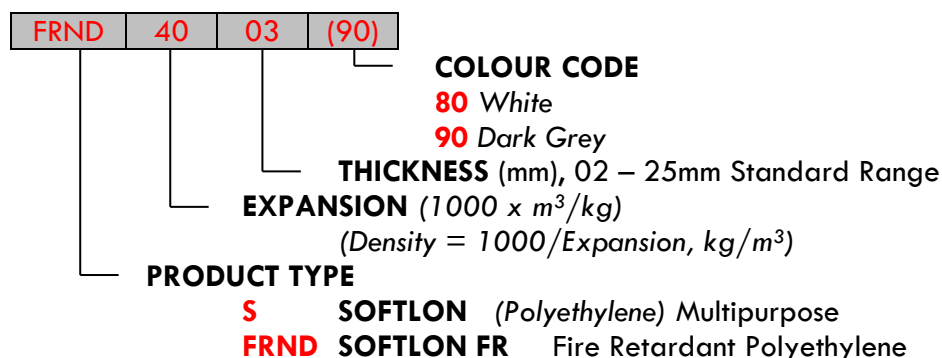
Softlon® FR-ND 4000 is a flexible closed cell, electron beam crosslinked, fire retardant polyolefin foam with a smooth outer skin. Due to the unique manufacturing process, Softlon® FR-ND 4000 exhibits consistent thickness and density, and possesses a fine cell structure.

The foam is free of heavy metals, PVC, plasticisers and CFCs. Softlon® FR-ND 4000 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 ³ (nominal)	Internal
Tensile Strength	3.1 kg/cm ² (longitudinal) 1.7 kg/cm ² (crosswise)	JIS K6767
Elongation	215% (longitudinal) 144% (crosswise)	JIS K6767
Tear Strength	1.7 kg/cm (longitudinal) 0.9 kg/cm (crosswise)	JIS K6767
Compression Strength	0.30 kg/cm ² @ 25% 0.85 kg/cm ² @ 50% 2.61 kg/cm ² @ 75%	Internal
Compression Set	7.5% @ 25% deflection	JIS K6767
Dimensional Change Heat	-1.40% (longitudinal) -0.90% (crosswise)	70°C, 22h
Working Temperature Range	-80 / +100 °C	Internal
Thermal Conductivity	0.032 W/m/°K @ 23 °C mean temperature	ASTM C518
Flammability Properties	Pass	UL94 (HF-1)
Water Absorption	0.10 mg/cm ²	JIS K6767
Water Vapour Permeability	8.3 x 10 ⁻¹⁴ 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 4000 products made at Thai Sekisui Foam:

Thickness	
Nominal Thickness	Tolerance¹
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
20mm	18.8 – 21.6mm
25mm	23.5 – 26.8mm

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

²Applies to the foam core.

Width³ (Sheet)	
Nominal Width	Tolerance
1000mm	-0 / +20mm
1200mm	
1500mm	

³Other 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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