



## **TECHNICAL DATA SHEET**

# Thermobreak® LS Sheet and Tube

Material: Physically (irradiation) crosslinked closed cell polyolefin

foam with factory applied reinforced aluminium foil and

optional pressure sensitive adhesive backing

**Density:** 1.5 pcf (foam core only)

Thermal Conductivity: 0.22 BTU.in/h.ft².°F (@ 73°F mean temperature)

(ASTM C518)

Water Vapour Permeability: 0.002 perm-inch

(ASTM E96)

Water Vapour Permeance: 0.0034 perms (1/2" thickness)

Permeability Resistance Factor:  $\mu > 80,000$ 

Water Absorption by Volume: < 0.2% v/v

(ASTM C1763, Procedure B, 24h)

Resistance to Fungi: Zero Growth

(ASTM G21)

**Leachable Chlorides:** < 12 ppm (< 0.0012% w/w)

(ASTM C871)

Ozone Resistance: Excellent

UV Resistance: Excellent

VOC Emission Rate: Low VOC emitting ("Green Star")

(ASTM D5116)

Operating Temperature Range:  $-112 \, ^{\circ}\text{F} \sim +212 \, ^{\circ}\text{F}$  (no adhesive)

Physical Property Requirements: COMPLIES (ASTM C1427)

FIRE AND SMOKE PERFORMANCE

AS 1530 Part 3 Ignitability Index: 0

Spread of Flame Index: 0
Heat Evolved Index: 0
Smoke Developed Index: 0 - 1

ASTM E84 (UL 723): COMPLIES (NFPA 90A & B)

Flame Spread Index:  $\leq$ 25 Smoke Developed Index:  $\leq$ 50

BS 476 Parts 6 & 7: CLASS 0

EN 13823 (Sheet) Single Burning Item: COMPLIES (EUROCLASS B – s2, d0 RATING)

ISO 11925 Part 2 (Sheet) Ignitability: COMPLIES (EUROCLASS B – s2, d0 RATING)

FM 4924 (Sheet) Up to 1" thickness FM APPROVED





ISO 5659 Part 2

**Smoke Density** 

COMPLIES (EN 45545:2 R1, HL3 RATING)

**Smoke Toxicity** 

COMPLIES (EN 45545:2 R1, HL3 RATING)

#### **TOLERANCES**

The following tables list tolerances for thickness, density and width of standard Thermobreak® LS products:

<u>Thickness</u>	
Nominal Thickness	Tolerance (based on SI nominal value and converted from SI units)
3/8" (10mm)	0.35" - 0.45"
1/2" (12mm)	0.43" - 0.53"
5/8" (15mm)	0.55" - 0.67"
3/4" (20mm)	0.75" – 0.87"
1" (25mm)	0.95" – 1.10"
1 1/2" (40mm)	1.50" – 1.70"
2" (50mm)	1.90" – 2.10"
Other thicknesses and tolerances subject to confirmation.	

Density* (foam only)		
Nominal Density	Tolerance (based on SI nominal value and converted from SI units)	
1.5 pcf (25 kg/m³)	± 10%	
*Applies to the foam core. The density of Thermobreak with reinforced		
aluminium foil will be higher.		

Width (Sheet)		
Nominal Width	Tolerance (based on SI nominal value and converted from SI units)	
48" (1200mm)	47.2" – 48.0"	
Other widths and/or tolerances subject to confirmation.		

### **ENQUIRIES**

If you require any further information, please consult your local distributor or contact us at

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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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