



# **TECHNICAL DATA SHEET**

# Thermobreak® LS-F Tube

Material: Physically (irradiation) crosslinked closed cell polyolefin

foam with factory applied reinforced aluminium foil

**Density:** 25 kg/m³ (foam core only)

Thermal Conductivity: 0.032 W/m.°K (@ 23°C mean temperature)

(ASTM C518)

Water Vapour Permeability: 2.3 x 10<sup>-15</sup> kg/Pa.s.m

(ASTM E96) (0.0084 mg.m/N.h)

Water Vapour Permeance:  $1.95 \times 10^{-4} \, \text{g/MN.s}$ 

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

Operating Temperature Range:  $-80 \, ^{\circ}\text{C} \sim +100 \, ^{\circ}\text{C}$ 

Physical Property Requirements: COMPLIES (ASTM C1427)

**REACH Directives:** COMPLIES (1907/2006/EC)

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: COMPLIES (NFPA 90A & B)

Flame Spread Index: ≤25 Smoke Developed Index: ≤50

BS 476 Parts 6 & 7: CLASS 0

FM 4924 (Tube) Up to 8" IPS (219 mm ID) FM APPROVED

Up to 50mm wall thickness

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-F Tube products:

<u>Thickness</u>	
Nominal Thickness	Tolerance
1 <i>5</i> mm	-1.0mm / +2.0mm
20mm	-1.0mm / +2.0mm
25mm	-1.0mm / +2.5mm
30mm	-1.0mm / +2.5mm
35mm	-1.0mm / +2.5mm
40mm	-1.5mm / +3.0mm
45mm	-1.5mm / +3.0mm
50mm	-2.0mm / +3.5mm
Other thicknesses and tolerances subject to confirmation.	

Density* (foam only)		
Nominal Density	Tolerance	
25 kg/m <sup>3</sup>	± 10%	
*Applies to the foam core. The density of Thermobreak with reinforced		
aluminium foil will be higher.		

# **COUNTRY OF MANUFACTURE**

Thermobreak® LS-F Tube insulation is manufactured in Thailand.

# **ENQUIRIES**

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

# **SEKISUI FOAM AUSTRALIA**

1-5 Parraweena Road Taren Point NSW 2229 AUSTRALIA

Tel: +61 2 9525 9880 Fax: +61 2 9525 8004 Email: info@sekisuifoam.com.au Web: www.sekisuifoam.com.au

# THAI SEKISUI FOAM

700/329 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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