

## TECHNICAL DATA SHEET

### Thermobreak<sup>®</sup> LS Sheet and Tube

|  |  |
|--|--|
| <b>Material:</b>   | Physically (irradiation) crosslinked closed cell polyolefin foam with factory applied reinforced aluminium foil and optional pressure sensitive adhesive backing |
| <b>Density:</b>  | 1.5 pcf (foam core only)   |
| <b>Thermal Conductivity:</b><br>(ASTM C518)                          | 0.22 BTU.in/h.ft <sup>2</sup> .°F (@ 73°F mean temperature)  |
| <b>Water Vapour Permeability:</b><br>(ASTM E96)                      | 0.002 perm-inch  |
| <b>Water Vapour Permeance:</b>                                       | 0.0034 perms (1/2" thickness)  |
| <b>Permeability Resistance Factor:</b>                               | μ > 80,000   |
| <b>Water Absorption by Volume:</b><br>(ASTM C1763, Procedure B, 24h) | < 0.2% v/v   |
| <b>Resistance to Fungi:</b><br>(ASTM G21)                            | Zero Growth  |
| <b>Leachable Chlorides:</b><br>(ASTM C871)                           | < 12 ppm (< 0.0012% w/w)   |
| <b>Ozone Resistance:</b>   | Excellent  |
| <b>UV Resistance:</b>  | Excellent  |
| <b>VOC Emission Rate:</b><br>(ASTM D5116)                            | Low VOC emitting ("Green Star")  |
| <b>Operating Temperature Range:</b>                                  | -112 °F ~ +212 °F (no adhesive)  |
| <b>Physical Property Requirements:</b>                               | COMPLIES (ASTM C1427)  |

### **FIRE AND SMOKE PERFORMANCE**

|                                 |                               |   |
|---------------------------------|-------------------------------|---|
| <b>AS 1530 Part 3</b>           | <b>Ignitability Index:</b>    | <b>0</b>                                      |
|                                 | <b>Spread of Flame Index:</b> | <b>0</b>                                      |
|                                 | <b>Heat Evolved Index:</b>    | <b>0</b>                                      |
|                                 | <b>Smoke Developed Index:</b> | <b>0 – 1</b>                                  |
| <b>ASTM E84 (UL 723):</b>       | <b>Flame Spread Index:</b>    | <b>COMPLIES (NFPA 90A &amp; B)</b>            |
|                                 | <b>Smoke Developed Index:</b> | <b>≤25</b>                                    |
| <b>BS 476 Parts 6 &amp; 7:</b>  |                               | <b>≤50</b>                                    |
|                                 |                               | <b>CLASS 0</b>                                |
| <b>EN 13823 (Sheet)</b>         | <b>Single Burning Item:</b>   | <b>COMPLIES (EUROCLASS B – s2, d0 RATING)</b> |
| <b>ISO 11925 Part 2 (Sheet)</b> | <b>Ignitability:</b>          | <b>COMPLIES (EUROCLASS B – s2, d0 RATING)</b> |
| <b>FM 4924 (Sheet)</b>          | <b>Up to 1" thickness</b>     | <b>FM APPROVED</b>                            |

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:

| <b>Thickness</b>  |                   |
|---|-------------------|
| <b>Nominal Thickness</b>                                  | <b>Tolerance</b>  |
| 3/8"  | -0.04in / +0.06in |
| 1/2"  | -0.04in / +0.06in |
| 5/8"  | -0.04in / +0.08in |
| 3/4"  | -0.04in / +0.08in |
| 1"  | -0.04in / +0.10in |
| 1 1/2"  | -0.06in / +0.12in |
| 2"  | -0.08in / +0.14in |
| Other thicknesses and tolerances subject to confirmation. |                   |

| <b>Density* (foam only)</b>  |                  |
|--|------------------|
| <b>Nominal Density</b>   | <b>Tolerance</b> |
| 1.5 pcf  | ± 10%            |
| *Applies to the foam core. The density of Thermobreak with reinforced aluminium foil will be higher. |                  |

| <b>Width (Sheet)</b>                                    |                  |
|---|------------------|
| <b>Nominal Width</b>                                    | <b>Tolerance</b> |
| 47" (1200mm)  | -0 / +0.80in     |
| 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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