

# ZOTEK® T 85

## High Performance Foams

# ZOTEK®

### Product information

#### Typical values

ZOTEK® T 85 is a closed cell, foam of density 85 kg/m<sup>3</sup> made from thermoplastic elastomer available in sheet form. The foam will thermoform into simple and complex shapes. This product information sheet provides typical values for the foam and does not constitute a specification.

THIS PROVISIONAL DOCUMENT IS BASED ON LIMITED BATCH DATA.

| Property  | Test Standard                   | Units                           | Typical Value |
|---|---------------------------------|---------------------------------|---------------|
| <b>Apparent Density</b>                           |                                 |                                 |               |
| Skin/Skin   | BS EN ISO 7214:2012             | kg/m <sup>3</sup> (pcf)         | 95 (5.9)      |
| Cell/Cell   |                                 |                                 | 85 (5.3)      |
| <b>Cell Size (cell diameter)</b>                  |                                 |                                 |               |
|   | Internal                        | mm (in)                         | 0.37 (0.01)   |
| <b>Compression Stress-Strain</b>                  |                                 |                                 |               |
| 25% compression                                   | BS EN ISO 7214:2012             | kPa (psi)                       | 100 (14.5)    |
| 50% compression                                   | 1 <sup>st</sup> Compression     |                                 | 180 (26.1)    |
| <b>Tensile Strength</b>                           |                                 |                                 |               |
|   | BS EN ISO 7214:2012             | kPa (psi)                       | 750 (108)     |
| <b>Tensile Elongation</b>                         |                                 |                                 |               |
|   |                                 | %                               | 400           |
| <b>Tear Strength</b>                              |                                 |                                 |               |
|   | BS EN ISO 8067:2008<br>Method A | N/m                             | 4500          |
| <b>Compression Set</b>                            |                                 |                                 |               |
| 50% comp. / 22hr / 23°C                           | BS EN ISO 7214:2012             |                                 |               |
| ½ hr recovery                                     | 25mm cell-cell                  | % set                           | 18            |
| 24hr recovery                                     |                                 |                                 | 6             |
| <b>Hardness</b>                                   |                                 |                                 |               |
|   | ASTM D-2240                     | Asker C                         | 30            |
| <b>Resilience</b>                                 |                                 |                                 |               |
|   | ISO 8307                        | %                               | 60            |
| <b>Thermal conductivity</b>                       |                                 |                                 |               |
| Mean temperature of 0 °C (32 °F)                  |                                 | W/m.K                           | 0.036 (0.25)  |
| Mean temperature of 25 °C (77 °F)                 | ISO 8301                        | (Btu in/ft <sup>2</sup> .hr.°F) | 0.039 (0.27)  |
| Mean temperature of 80 °C (176 °F)                |                                 |                                 | 0.044 (0.31)  |
| <b>Recommended maximum operating temperature*</b> |                                 |                                 |               |
|   | Internal                        | °C (°F)                         | 130 (266)     |

\* Recommended maximum operating temperature

The maximum operating temperature shown is defined as the temperature which will typically cause a linear shrinkage of 5% after a 24hr exposure period, using sample dimensions of 100mm x 100mm x 25mm. This figure is provided for general guidance only. The actual level of shrinkage the foam will undergo at any temperature is dependent on several system variables such as, sample dimensions, cell size, loading conditions and exposure period.

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