

ZOTEK® NB 50

High Performance Foams

ZOTEK®

Product information

Typical values

ZOTEK® N B50 is closed cell foam of density 50 kg/m³ made from polyamide 6 available in sheet form. The material will thermoform into simple and complex shapes. This product information sheet provides typical values for the foam and does not constitute a specification.

All samples tested were conditioned for 6 days at 23 °C ±1 50% RH ±5

| Property | Test Standard | Units | Typical Value |
|---------------------------------------|-----------------------------|---------------------------------|---------------|
| Apparent Density | | | |
| Skin/Skin | BS EN ISO 7214:2012 | kg/m ³ (pcf) | 50 (3.1) |
| Cell/Cell | | | 48 (3) |
| Cell Size (cell diameter) | | | |
| | Internal | mm (in) | 0.25 (0.01) |
| Compression Stress-Strain | | | |
| 25% compression | BS EN ISO 7214:2012 | kPa (psi) | 190 (27.5) |
| 50% compression | 1 st Compression | | 280 (40.6) |
| Tensile Strength | | | |
| | BS EN ISO 7214:2012 | kPa (psi) | 1300 (188) |
| Tensile Elongation | | | |
| | | % | 90 |
| Compression Set | | | |
| 25% comp. / 22hr / 23°C | BS EN ISO 7214:2012 | | |
| ½ hr recovery | 25mm cell-cell | % set | 16 |
| Thermal Conductivity | | | |
| Mean Temperature | ISO 8301 | W/mK | 0.0381 |
| | 25 °C (77 °F) | (Btu in/ft ² .hr.°F) | (0.264) |
| Maximum Operating Temperature* | | | |
| | Internal | °C (°F) | 205 (401) |

***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 particular temperature is dependent on a number of system variables such as, sample dimensions, cell size, loading conditions and exposure period.

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FM 01870
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OHS 52538
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