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## Specification Sheet / 01 LD24 FR Polyethylene Foam



SO9001, ISO14001, ISO45001 Certificate Ref: 11738

## General

Plastazote is a closed cell, cross-linked polyethylene foam manufactured using a unique production process. This data sheet characterises Plastazote foam LDI8 which is available in sheet form and is fabricated by modern techniques and can be thermoformed into shapes.

| Property  | Test Procedure   | Units  | Value                             |
|---|--|--|-----------------------------------|
| Nominal density- skin/Skin                                | BS ISO 7214 1998   | kg/m³  | 24                                |
| Cell Size - Typical Diameter                              | Internal   | mm   | 0.3                               |
| Compression Stress- Strain<br>10% compression             | BS ISO 7214 1998   | kPa  | 32                                |
| Compression Stress- Strain<br>25% compression             | BS ISO 7214 1998   | kPa  | 51                                |
| Compression Stress- Strain<br>40% compression             | BS ISO 7214 1998   | kPa  | 83                                |
| Compression Stress- Strain<br>50% compression             | BS ISO 7214 1998   | kPa  | 115                               |
| Compression Set   | BS ISO 7214 1998   | % Set  | 13                                |
| 25% comp 22 Hr 23°C<br>1/2 hr recovery                    | 25mm cell-cell   |  |                                   |
| Compression Set   | BS ISO 7214 1998   | % Set  | 5.5                               |
| 25% comp 22 Hr 23°C<br>24 hr recovery                     | 25mm cell-cell   |  |                                   |
| Compression Set<br>50% comp 22 Hr 23°C<br>1/2 hr recovery | BS ISO 7214 1998<br>25mm cell-cell                               | % Set  | 27                                |
| Compression Set<br>50% comp 22 Hr 23°C<br>24 hr recovery  | BS ISO 7214 1998<br>25mm cell-cell                               | % Set  | 19                                |
| Tensile Strength  | ISO 7214 1998  | kPa  | 240                               |
| Tensile Elongation  | ISO 7214 1998  | %  | 115                               |
| Tear Strength   | BS EN ISO 8067 1995  | N/m  | 475                               |
| Shore Hardness OO scale<br>10mm cell/cell thickness       | ISO 868 1985   | 00   | 49                                |
| Recommended Operating<br>Temperature Range*               | Internal   | °C   | +100 Max<br>-70 min               |
| Thermal Conductivity<br>Mean Temp 10°C                    | ISO 832 1991   | W/m.K  | 0.0351                            |
| Flammability<br>Automotive                                | FMVSS.302-Burn rate  | <100mm/min                                     | Pass: 2mm and thicker             |
| Flammability<br>Aviation                                  | FAR -25.853 F 1a. 1ii<br>JAR -25.853 F 1a. 1ii<br>CAA8 /2 - 2.2b | Complies                                       |                                   |
| Flammability<br>Construction                              | DIN 4102 pt14 ? B1<br>UL94 HF1 + HF2                             | Pass: 6 to 20mm thick<br>Pass: 3 to 13mm thick |                                   |
| Horizontal Burn Rate                                      | ISO 7214 1998  | 5mm thick<br>13mm thick                        | Extinguishes and melts from flame |

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## Specification Sheet / 02 LD24 FR Polyethylene Foam



ISO9001, ISO14001, ISO4500

\*Recommended Operating Temperature Range

The maximum operating temperature shown is defined as the temperature which will typically cause a linear shrinkage of 5% after a 24 hr 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 amd exposure period.

| Change Control Date | Change  |
|---------------------|---------|
| 28/11/2016          | Created |



The above figures are average values.

We recommend that you examine any material you select to ensure its suitability for your application.

Tolerance(s) applied in accordance with ASG specification No WI007 (https://bit.ly/3nKm6Hj) unless otherwise stated.

Our standard terms and conditions of trading (https://bit.ly/3b3mThw) apply at all times.



