



|                   | Properties                                  | DIN or ASTM Standard | Unit              | FEP       |
|-------------------|---|----------------------|-------------------|-----------|
| <b>Physical</b>   | Specific Gravity                            | 53479                | g/cc              | 2.12-2.17 |
|                   | Maximum Working Temperature                 |                      | °C                | 205       |
|                   | Flame Rating                                |                      | UL-94             | 94 V-0    |
|                   | Water Absorption                            | 53495                | %                 | <0.01     |
| <b>Mechanical</b> | Ultimate tensile strength at 23°C           | 53455                |                   | 19-25     |
|                   | Ultimate tensile strength at 150°C          |                      | Mpa               | 4-6       |
|                   | Ultimate tensile strength at 250°C          |                      |                   | n.a.      |
|                   | Yield point as 23°C                         | 53455                | N/mm <sup>2</sup> | 12        |
|                   | Elongation at break , at 23°C               | 53455                | %                 | 250-350   |
|                   | Modulus of elasticity in tension at 23°C    | 53457                | N/mm <sup>2</sup> | 350-700   |
|                   | Maximum bending stress at 23°               | 53452                | Mpa               |           |
|                   | Flexural Modulus                            | 53457                | N/mm <sup>2</sup> | 660-680   |
|                   | Ball Hardness 132-60                        | 53456                | N/mm <sup>2</sup> | 23-29     |
|                   | Rockwell Hardness R                         | ASTM-D-785           |                   |           |
|                   | Shore Hardness D                            | 53505                |                   | 55-60     |
|                   | Coefficient of friction (dry with steel)    |                      |                   | 0.30-0.35 |
| <b>Thermal</b>    | Melting temperature                         | ASTM 2116            | °C                | 253-282   |
|                   | Heat deflection temperature @ 18.5 Kp/sq.cm | 53461                | °C                | 51        |
|                   | Heat deflection temperature @ 4.6 Kp/sq.cm  | ISO R 75             | °C                | 70        |
|                   | Coefficient of expansion                    |                      | 1/K.10-5          | 8-14      |
|                   | Thermal conductivity at 23°C                | 52612                | W/K.m             | 0.20      |
|                   | Specific heat at 23°C                       |                      | Kj/Kg.K           | 1.17      |
|                   | Oxygen index                                |                      | %                 | >95       |
| <b>Electrical</b> | Relative permittivity at 10 (3) Hz          | 53483                |                   | 2.1       |
|                   | Relative permittivity at 10 (6) Hz          |                      |                   | 2.1       |
|                   | Surface resistivity                         | ICE 93+167           | Ohms              | 10 (16)   |
|                   | Arc resistance                              | ASTM 495             | sec               | >300      |
|                   | Dielectric strength                         | 53481                | KV/mm             | 50-80     |

IMPORTANT NOTE: The above data is intended as a guide and is taken from resin manufacturers data. Adtech cannot take responsibility for the accuracy of the data. Customers must evaluate the material under the relevant conditions if the properties are critical to their applications.

**For technical assistance, contact our customer service team:**

**+44 (0)1285 762000 - [sales@adtech.co.uk](mailto:sales@adtech.co.uk)**