All of this Technical Information has been determined with due care and thoroughness. However, because the conditions of use and process and application technologies employed can substantially vary, the provided data and figures can only serve as non-binding guidelines. They do not constitute a guarantee that the purchased item will possess certain attributes. For this reason, no liability whatsoever can be assumed for them. The buyer is obliged to check the suitability of all supplied products.

TWS

Technical Characteristics

TWS represents a family of high performance matte-sided treated products designed to provide high bond strength on a wide range of high Tg substrates and new engineering plastics. The base foil is characterized by enhanced high temperature elongation properties [IPC-Grade 3] and thermally stable microstructure.

The product is designed for the manufacture of high performance laminates with extended thermal stability and electrical properties.

Typical substrates include polyimide, cyanate esters, hydrocarbon-ceramics and thermoplastics.

For fluorocarbon containing resins, please consult HFZ-LP and BF-HFZ datasheets.

Typical average properties*

<table>
<thead>
<tr>
<th>TWS</th>
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<td><strong>MEASURED PARAMETERS</strong></td>
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<td>Untreated Side Roughness (Ra)</td>
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<td>Tensile Strength Transverse at RT</td>
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<td>Peel Strength (RT)</td>
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<tr>
<td>High Temp. Tarnish Resistance</td>
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<tr>
<td>Solubility</td>
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</tbody>
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* Laminate construction with thickness ≥ 0.5 mm

Higher laminate bond strength on “difficult to bond” high Tg substrates are achieved through a combination of increased mechanical bonding surface area and, where applicable, chemical adhesion.

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