



Standard Specification – TESLIN® SP700 Substrate (7 mil/178 micron)

TESLIN® substrate from PPG Industries is a microporous, highly filled, single-layer, polyolefin synthetic material. An inorganic filler comprises 60 percent of the weight, and it is 65 percent air by volume. The porous, uncoated nature of *Teslin* substrate allows inks, adhesives, coatings, and laminating films to penetrate into its structure, forming strong interlocking bonds with the substrate.

Standard Specification Limits

| <u>Property</u> | <u>Tolerance</u> | <u>Unit</u> | <u>Method</u> |
|---|------------------|--------------------------|---------------|
| Gauge | 6.3 - 7.0 | mils | ASTM D-374 |
| Gauge | 160 - 196 | microns | ASTM D-374 |
| Sheffield Smoothness (Top Surface) | 10 - 65 | Sheffield units | Tappi T-538 |
| Sheffield Smoothness (Bottom Surface) | 10 - 100 | Sheffield units | Tappi T-538 |
| Whiteness Index¹ | 75 min. | % | ASTM E-313 |
| Shrinkage² | 4.0 max. | % | PPG method |
| Visual Inspection (Black Specks)³ | 300 max. | count/1000m ² | PPG method |
| Visual Inspection (Holes)³ | 200 max. | count/1000m ² | PPG method |
| Visual Inspection (Inclusions)³ | 200 max. | count/1000m ² | PPG method |

- 1 As measured at time of manufacture. Blue grade has Whiteness Index value of 85 – 110 %. All other properties/specifications are the same for Blue and SP grades.
- 2 The maximum allowable shrinkage for TS grade is 2% (measured at 135 °C for 15 minutes in a forced air oven). All other properties/specifications are the same for TS and SP grades.
- 3 Minimum detectable defect size by the Visual Inspection System: 0.3 mm².

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