

Longhua® PP-WT/BK Film Datasheet

Description:

Longhua® PP-WT/BK are flame-retardant polypropylene film/sheet. Material meets ROHS directive and is listed as UL94 V0 & VTM-0. This material was designed for use in power supply insulation, TV/monitor insulation, business equipment insulation and foil laminated for insulation and shielding.

UL File Number E254551.

| Grade | Color | Texture | Thickness (mm) | Width (mm) | Versus other brands |
|-------------------|-------|---------------|------------------------------------|--------------------------|---------------------|
| Longhua® PP-WT10 | White | matte/velvet | 0.125 - .300 (0.005" - 0.012") | 610 & 01230 (2' & 4') | GK-10 |
| Longhua® PP-WT17 | White | matte/leather | 0.400 - 1.500 (0.016" - 0.063") | 610 & 01230 (2' & 4') | GK-17-- GK-62 |
| Longhua® PP-BK15F | Black | Matte/velvet | 0.125 - .250 (0.005" - 0.010") | 610 & 01230 (2' & 4') | GK-5BK, GK-10 |
| Longhua® PP-BK 17 | Black | matte/leather | 0.400 - 1.500 (0.016" - 0.063") | 610 & 01230 (2' & 4') | GK-17 - GK-62 |

*customized 1230mm width products available

Typical Property Values

| Property | Test Method | Units | Value |
|--------------------------------------|-----------------------------|-------------------|------------------|
| PHYSICAL | | | |
| Specific Gravity | ASTM D792 | G/cm ³ | 1.00 |
| Water Absorption Equilibrium, 24 hrs | ASTM D570 | % | 0.06 |
| MECHANICAL | | | |
| Tensile Strength | ASTM D882 ISO R1184-1987 | Psi Mpa | 3,000 >20 |
| Elongation Ultimate | ASTM D882 | % | 100 |
| Tear Strength Propagation | ASTM D1922 | G/mil | 25 |
| THERMAL | | | |
| HDT at 0.45 Mpa | ASTM D1525 | °C | 106 |
| RTI at 0.40mm | UL746B | °C | 105 |
| RTI at 0.80mm | UL746B | °C | 115 |
| ELECTRICAL | | | |
| Dielectric Breakdown Volts | ASTM D149 | | |
| @ 5mils | ASTM D149 | KV | 11.0 |
| @ 10mils | ASTM D149 | KV | 22.0 |
| @ 17mils | ASTM D149 | KV | 25.0 |
| @ 30mils | ASTM D149 | KV | 32.0 |
| @ 40mils | ASTM D149 | KV | 38.0 |
| Volume Resistivity @ 25°C, 50%RH | ASTM D257 | Ohm-cm | 10 ¹⁶ |
| Surface Resistivity @ 25°C, 50%RH | ASTM D257 | Ω/ | 10 ¹⁵ |
| FLAMMABILITY | | | |
| UL Flammability | UL Bulletin 94 | | |
| @ ≥ 15mils | | UL94 | V-0 |
| @ < 15mils | | UL94 | VTM-0 |

**NOTE: The above figures are typical values obtained under standard methods and should not be construed as guaranteed data under unsteady application conditions.

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| Property | Units | Limits |
|-----------------|-------|--|
| Gauge variation | mm | 0.125 - 0.380mm ± 0.02mm 0.430 - 0.450mm + 0.04mm/-0.03mm 0.760 - 1.00mm ± 0.05mm 1.5mm ± 0.1mm |

| Environment-Protection Index | Longhua® PP-WT | Longhua® PP-BK |
|------------------------------|----------------------------------|---------------------------------|
| Hg | N.D. (<2ppm) | N.D. (<2ppm) |
| 6 /Cr (VI) | N.D. (<2ppm) | N.D. (<2ppm) |
| Cd | N.D. (<2ppm) | N.D. (<2ppm) |
| Pb | <50ppm (Sony Recommend: <100ppm) | 50ppm (Sony Recommend: <100ppm) |
| PBB | N.D. (<5ppm) | N.D. (<5ppm) |
| PBDE | N.D. (<5ppm) | N.D. (<5ppm) |