

A100F40-7016UV

A100F40-7016UV is a chopped fiber glass mat reinforced PP laminate with randomly oriented glass fibers. This product provides good flow properties, a very homogeneous fiber distribution and an additional UV-stabilization. It is commonly used for outdoor parts like air condition carrier and hoods for industrial applications.

| Properties | Standard | SI Units | | Engl. Units | |
|---|----------------------|-----------------------|---------------------|-------------------|---------------------|
| Physical Properties | | | | | |
| Laminate Thickness* | Internal | 3.7 | mm | 0.146 | in |
| Area Weight* | Internal | 4477 | g/m ² | 0.917 | lb/ft ² |
| Fiber Content* | ISO 1172 / PA_73, 78 | 40 | % | 40 | % |
| Density (Laminate)* | ISO 1183 / PA_137 | 1.21 | g/cm ³ | 0.0437 | lb/in ³ |
| Density (Molded)** | ISO 1183 / PA_138 | 1.22 | g/cm ³ | 0.0441 | lb/in ³ |
| Mechanical Properties³⁾** | | | | | |
| Tensile Strength | ISO 527 / PA_098 | 80 | MPa | 11604 | psi |
| Tensile Elongation at Break | ISO 527 / PA_098 | 1.8 | % | 1.8 | % |
| Tensile Modulus | ISO 527 / PA_098 | 5470 | MPa | 793 | ksi |
| Flexural Strength | ISO 178 / PA_100 | 130 | MPa | 18857 | psi |
| Flexural Modulus | ISO 178 / PA_100 | 5950 | MPa | 863 | ksi |
| Impact Strength - | IZOD (3.2 mm) | | J/m | | ft*lb(wt)/in |
| | Charpy (4.0 mm) | ISO 179-1/2fn / PA_97 | 65 | kJ/m ² | 31 |
| Multiaxial Impact (4.0 mm) | | | | | |
| Max. Load | ASTM D-3763 | | N | | lb(wt) |
| Energy @ Max. Load | | | J | | ft*lb |
| Energy @ Failure | | | J | | ft*lb |
| Max. Load | ISO 6603-2 / PA_406 | | N | | lb(wt) |
| Energy @ Max. Load | | | J | | ft*lb |
| Energy @ Failure | | | J | | ft*lb |
| Processing Properties** | | | | | |
| Molding Shrinkage | ISO 2577 | 0.2 - 0.3 | % | 0.2 - 0.3 | % |
| Special Properties** | | | | | |
| Heat Deflection Temperature | ISO 75-2A / PA_350 | 159 | °C | 318 | °F |
| Coefficient of Thermal Expansion | EN ISO 11403-2 | 15 - 25 | 10 ⁻⁶ /K | 15 - 25 | 10 ⁻⁶ /K |
| Burning Rate | ISO 3795 / FMVSS302 | < 10 | mm/min | < 0.4 | in/min |

1) = measured in longitudinal direction

2) = measured in transverse direction

3) = crosswise molded

4) = lengthwise molded

* = Property was determined on the laminate

** = Property was determined on flat crosswise molded plaques

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