APSOplast® PMMA-XT



Engineering plastics technology Technical Data Sheet

| Material name, short description | PMMA-XT |
|---|-----------------------------------|
| Material name, based on technical standards | Dalumathul mathaanilata aytiiydad |
| Material name, based on technical standards | Polymethyl methacrylate extruded |
| Density | 1.19 g/cm³ |
| Beriotty | 1.10 g/0111 |
| Color | transparent |
| | |
| Compound code | PMMA-XT 00.006-00 |

Mechanical properties

| Tensile strength | 35 N/mm ² ISO 527-2,1B,5 70°C |
|----------------------------------|--|
| Elongation at break | 4.5 % ISO 527-2,1B,5 |
| Flexural modulus of elasticity | 3300 N/mm² ISO 527-2,1B,1 |
| Bending strength 1 | 105 N/mm² ISO 178 Normbar 80 x 10 x 4 mm |
| Ball indentation hardness | 175 N/mm² ISO 2039-1 |
| Impact strength | #ErrorkJ/m² ISO 179/1fU Charpy |
| Notch impact strength | 1.60 kJ/m² ISO 180-1A acc. Izod |
| Coefficienct of sliding friction | 0.5 Plastic on steel |
| | |

Other attributes

| Water absorption | 38 mg ISO 62-1 24h, 23°C Sample 60 x 60 x 2 mm |
|-------------------------|---|
| Refractive index | 1.491 ISO 489 |
| Light reflection degree | 4 % Visual Area, pro Surface |

Thermal attributes

| Max. operating temperature long term | 70 °C |
|---|--|
| Coefficient of linear thermal expansion 1 | 5 mm/m Temperature/Humidity |
| Coefficient of linear thermal expansion 2 | 7 10^5K-1 DIN 53752-A 0 - 50°C |
| Heat deflection temperature 1 | 95 °C ISO 75 Bending Tension 1.8 N/mm² |
| Heat deflection temperature 2 | 100 °C ISO 75 Bending Tension 0.45 N/mm² |
| Specific heat capacity | 1.47 J/(g·K) |
| Thermal conductivity | 0.19 W/(m·K) DIN 52612 |

Electrical attributes

| Comparative tracking index | 600 CTI DIN VDE 0303-1 |
|---------------------------------|--------------------------------------|
| Dielectric dissipation factor 1 | 0.06 DIN VDE 0303-4 at 50 Hz |
| Dielectric constant 1 | 3.7 DIN VDE 0303-4 at 50 Hz |
| Dielectric strength 1 | 30 kV/mm DIN VDE 0303-2 |
| Surface resistivity | 10 ¹³ Ω DIN VDE 0303-3 |

In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.

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Approvals / Compliance

Food & Beverage

FDA CFR 21 - 177.1010 "Acrylic and modified acrylic plastics, semirigid and rigid"

EC No. 1935/2004

EC No. 1935/2004 incl. last amendments

Regulation EU 10/2011





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