Polyamid 6 food grade

DIN designation: **PA 6 FG**  
Test condition: **dry**

**Technical data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test method</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>ISO 1183-1</td>
<td>1,14</td>
<td>g/cm³</td>
</tr>
</tbody>
</table>

**Mechanical data**

- Yield stress: ISO 527, 80 MPa
- Elongation at break: ISO 527, 50 %
- Tensile modulus of elasticity: ISO 527, 3200 MPa
- Notched impact strength: ISO 179, 3 kJ/m²
- Shore hardness: ISO 868, 82 Skala D

**Electrical data**

- Dielectric constant: IEC 60250, 3,9
- Dielectric dissipation factor 50 Hz: IEC 60250, 0,02
- Volume resistivity: IEC 60093, $10^{15}$ Ω·cm
- Surface resistivity: IEC 60093, $10^{13}$ Ω
- Comparative tracking index: IEC 60112, 600
- Dielectric strength: IEC 60243, 20 kV/mm

**Thermal data**

- Crystalline grain melting range: ISO 11357-3, 220 °C
- Thermal conductivity: DIN 52612-1, 0,23 W/(m·K)
- Thermal capacity: DIN 52612, 1,70 kJ/(kg·K)
- Coefficient of linear thermal expansion: DIN 53752, 90 $10^{-6}$/K
- Service temperature long therm (max.): Prüfwerte, 85 °C
- Service temperature short therm (max.): Prüfwerte, 160 °C
- Service temperature long therm (min.): Prüfwerte, -40 °C
- Heat deflection temperature: ISO 75, A, HDT, 75 °C

**Other data**

- Water absorption: ISO 62, 3,0 %
- Flammability: UL 94, HB

**Material properties**

- suitable for contact with foodstuffs (according to EG-regulation No. 1935/2004)
- very tough
- high water intake
- very abrasion resistand
- good to machine
- easily weldable
- self-adhesive properties

**Application areas**

Food technology, Packaging technology, etc.

**Application examples**

sliding elements, conveying elements, guide rails, gear wheels, conveyor screws, etc.

---

ADS Drehservice GmbH  
Ridderstr. 57  
48683 Ahaus  
Phone: 02561 / 44 912-0  
Fax: 02561 / 44 912-12  
www.ads-kunststofftechnik.de  
info@ads-kunststofftechnik.de

---

**Info** In this data printout indicative values are given. These values are changing by the influence of processing conditions, modifications, material additives an environmental influences. These data are recommended values and out of experience. The user has to carry out his own experiments an audits with this material. These data are not legally binding. We can not assure that this material is suitable for your application. The recipient himself has the responsibility for the observance of any existing rights and protection rights.