



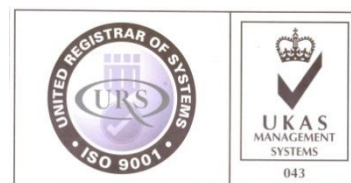
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**PA 6 (Polyamide 6)
Material Specification
(Typical Properties)**

Physical

| Property | Method | Units | Specification |
|------------------|---------------|-------------------|---------------|
| Specific Gravity | --- | g/cm ³ | 1.14 |
| Water Absorption | DIN EN ISO 62 | % | 0.3 / 0.6 |

Mechanical

| Property | Method | Units | Specification |
|---------------------------------------|--------------------|-------------------|---------------|
| Modulus of elasticity (tensile test) | DIN EN ISO 527-2 | MPa | 3300 |
| Tensile strength | DIN EN ISO 527-2 | MPa | 79 |
| Tensile strength at yield | DIN EN ISO 527-2 | MPa | 78 |
| Elongation at yield | DIN EN ISO 527-2 | % | 4 |
| Elongation at break | DIN EN ISO 527-2 | % | 130 |
| Flexural strength | DIN EN ISO 178 | MPa | 100 |
| Modulus of elasticity (flexural test) | DIN EN ISO 178 | MPa | 2900 |
| Compression strength | EN ISO 604 | MPa | 24 / 41 |
| Compression modulus | EN ISO 604 | MPa | 2700 |
| Impact strength (Charpy) | DIN EN ISO 179-1eU | kJ/m ² | n.b. |
| Notched impact strength (Charpy) | DIN EN ISO 179-1eA | kJ/m ² | 7 |
| Ball indentation hardness | ISO 2039-1 | MPa | 155 |

Electrical

| Property | Method | Units | Specification |
|------------------------------|------------------|-------|------------------|
| Specific surface resistance | DIN IEC 60093 | Ω | 10 ¹⁴ |
| Specific volume resistance | DIN EN 61340-2-3 | Ω*cm | 10 ¹⁴ |
| Dielectric strength | ISO 60243-1 | kV/mm | 31 |
| Resistance to tracking (CTI) | DIN EN 60112 | V | 600 |

Thermal

| Property | Method | Units | Specification |
|------------------------------|----------------------|----------------------------------|---------------|
| Glass transition temperature | DIN 53765 | °C | 104 |
| Melting temperature | DIN 53765 | °C | 221 |
| Service temperature | --- | °C | 100-160 |
| Thermal expansion (CLTE) | DIN EN ISO 11359-1;2 | 10 ⁻⁵ K ⁻¹ | 12 |
| Thermal expansion (CLTE) | DIN EN ISO 11359-1;2 | 10 ⁻⁵ K ⁻¹ | 13 |
| Specific heat | ISO 22007-4:2008 | J/(g*K) | 1.6 |
| Thermal conductivity | ISO 22007-4:2008 | W/(K*m) | 0.37 |

Disclaimer. These figures are typical values for the material and do not represent a product specification. Properties will vary depending on source of raw material, method of processing, physical form of product, direction of measurement etc.