



Nylon 66 Natural

PA66 (Polyamide 66)

Colour: Natural

Density: 1.15g/cm³

Material Data Sheet

| Mechanical Properties | Parameter | Value | Unit | DIN/EN/ISO |
|---------------------------------------|----------------------|-------|-------------------|------------|
| Modulus of elasticity (tensile test) | 1mm/min | 3500 | MPa | 527-2 |
| Tensile strength | 50mm/min | 85 | MPa | 527-2 |
| Tensile strength at yield | 50mm/min | 84 | MPa | 527-2 |
| Elongation at Yield | 50mm/min | 7 | % | 527-2 |
| Elongation at break | 50mm/min | 70 | % | 527-2 |
| Flexural strength | 2mm/min 10N | 110 | MPa | 178 |
| Modulus of elasticity (flexural test) | 2mm/min 10N | 3100 | MPa | 178 |
| Compression Strength | 1%/2% 5mm/min 10N | 20/35 | MPa | 604 |
| Compression modulus | 5mm/min 10N | 2700 | MPa | 604 |
| Impact strength (Charpy) | Max. 7,5J | N.B. | kJ/m ² | 179-1eU |
| Notched impact strength (Charpy) | Max. 7,5J | 5 | kJ/m ² | 179-1eA |
| Ball indentation hardness | - | 175 | MPa | 2039-1 |

| Thermal Properties | Parameter | Value | Unit | DIN/EN/ISO |
|------------------------------|----------------|-------|----------------------------------|--------------|
| Glass transition temperature | - | 47 | °C | 53765 |
| Melting temperature | - | 258 | °C | 53765 |
| Service temperature | Short term | 170 | °C | - |
| Service temperature | Long term | 100 | °C | - |
| Thermal expansion (CLTE) | 23-60°C, Long | 11 | 10 ⁻⁵ K ⁻¹ | 11359-1;2 |
| Thermal expansion (CLTE) | 23-100°C, Long | 12 | 10 ⁻⁵ K ⁻¹ | 11359-1;2 |
| Specific heat | - | 1.5 | J/(g*K) | 22007-4:2008 |
| Thermal conductivity | - | 0.36 | W/(K*m) | 22007-4:2008 |

| Electrical properties | Parameter | Value | Unit | DIN/IEC |
|-----------------------|-----------|------------------|------|---------|
| Surface resistance | - | 10 ¹⁴ | Ω | 60093 |

| Other properties | Parameter | Value | Unit | DIN/EN/ISO/IEC |
|-------------------------------|------------------|---------|------|----------------|
| Water absorption | 24h/96h (23°C) | 0.2/0.4 | % | 62 |
| Resistance to hot water/bases | - | (+) | - | - |
| Resistance to weathering | - | - | - | - |
| Flammability (UL94) | Corresponding to | HB | - | 60695-11-10 |

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The following information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of certain properties or the suitability for a specific application. Existing commercial patents must be observed. A definitive quality guarantee is given in our general conditions of sales. Unless otherwise stated, these values represent averages taken from injection moulding samples.

We reserve the right of technical alterations.