

Polyvinyl chloride – Stock Shapes

Chemical designation

PVC

Colour

Grey/White/Red/Black

Density

1.44 g/cm³

Fillers

| Mechanical properties | parameter | value | unit | norm | comment |
|--------------------------------------|------------------|--------------|-------------------|-------------------|----------------|
| Tensile strength at yield | | 45 | MPa | DIN EN ISO 527 | |
| Elongation at break | | 15 | % | DIN EN ISO 527 | |
| Modulus of elasticity (tensile test) | | 3000 | MPa | DIN EN ISO 527 | |
| Notched impact strength (Charpy) | | 2 | kJ/m ² | DIN EN ISO 179 | |
| Ball indentation hardness | | 140 | MPa | DIN EN ISO 2039-1 | |

| Thermal properties | parameter | value | unit | norm | comment |
|---|------------------|--------------|----------------------------------|-------------|----------------|
| Service temperature | short term | 70 | °C | Average | |
| Service temperature | long term | 60 | °C | Average | |
| Thermal conductivity | | 0.20 | W/(K*m) | DIN 52612-1 | |
| Coefficient of linear thermal Expansion | | 8 | 10 ⁻⁵ K ⁻¹ | DIN 53752 | |

| Electrical properties | parameter | value | unit | norm | comment |
|------------------------------|------------------|------------------|-------------|-------------|----------------|
| Surface resistance | | 10 ¹³ | Ω | IEC 60093 | |
| Specific volume resistance | | 10 ¹⁵ | Ω*cm | IEC 60093 | |
| Dielectric constant | | 3 | | IEC 60250 | |
| Dielectric strength | | 39 | kV/mm | IEC 60243-1 | |

| Other properties | parameter | value | unit | norm | comment |
|-------------------------|------------------|--------------|-------------|-------------|----------------|
| Flammability | | V0 | | UL94 | |

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