



## PVDF 1000x500x70 mm black

|             |          |
|-------------|----------|
| Article No. | P1010661 |
| Category    | PVDF     |

### Technical Properties

#### Density & Weight

| Property | Value | Unit  | Test standard |
|----------|-------|-------|---------------|
| Density  | 1.78  | g/cm³ | ISO1183       |

#### Moisture Absorption

| Property                       | Value | Unit | Test standard |
|--------------------------------|-------|------|---------------|
| Water absorption to saturation | 0.15  | %    | ISO62         |
| Water Absorption to Saturation | 0.35  | %    | ISO62         |

#### Tensile Properties

| Property                        | Value | Unit | Test standard |
|---------------------------------|-------|------|---------------|
| Tensile Strength                | 40    | MPa  | ISO 527       |
| Modulus of elasticity (tensile) | 2200  | MPa  | ISO527-2      |
| Breakdown Voltage               | 46    | MPa  | ISO 527       |
| Break Elongation                | 17    | %    | ISO527-2      |

#### Flexural Properties

| Property          | Value | Unit | Test standard |
|-------------------|-------|------|---------------|
| Flexural Strength | 62    | MPa  | ISO527-2      |

#### Impact Resistance

| Property | Value | Unit | Test standard |
|----------|-------|------|---------------|
|----------|-------|------|---------------|

| Property                         | Value | Unit  | Test standard |
|----------------------------------|-------|-------|---------------|
| Notched impact strength (Charpy) | 8     | kJ/m² | ISO 179       |
| Impact Resistance (Charpy)       | 150   | kJ/m² | ISO179/1eU    |

Hardness

| Property               | Value | Unit      | Test standard |
|------------------------|-------|-----------|---------------|
| Hardness Shore D       | 80    | ° Shore D | ISO868        |
| Ball pressure hardness | 120   | MPa       | ISO 2039      |

Temperature Limits

| Property                                   | Value | Unit | Test standard |
|--------------------------------------------|-------|------|---------------|
| Melting point                              | 171   | °C   | ISO11357      |
| Maximal operating temperature (short-term) | 142   | °C   | UL746B        |
| Maximum Operating Temperature              | 130   | °C   | UL746B        |
| Minimum temperature                        | -26   | °C   |               |
| Heat deflection temperature (HDT/A)        | 104   | °C   | ISO 75        |
| Heat deflection temperature (HDT/B)        | 145   | °C   | ISO 75        |
| Vicat softening temperature (VST/B/50)     | 138   | °C   | ISO 306       |

Thermal Conductivity

| Property             | Value | Unit    | Test standard |
|----------------------|-------|---------|---------------|
| Thermal Conductivity | 0.25  | W/(m·K) | DIN22007-4    |

Thermal Expansion

| Property                      | Value | Unit                | Test standard |
|-------------------------------|-------|---------------------|---------------|
| Thermal Expansion Coefficient | 1.6   | 10 <sup>-4</sup> /K | ISO11359      |

Insulation Properties

| Property                       | Value            | Unit  | Test standard |
|--------------------------------|------------------|-------|---------------|
| Dielectric Strength            | 27               | kV/mm | IEC 60243-1   |
| Volume Resistivity             | 10 <sup>13</sup> | Ω·cm  | IEC 60093     |
| Dielectric Constant (1 MHz)    | 7.7              | -     | IEC 60250     |
| Dielectric loss factor (1 MHz) | 0.1              | -     | IEC 60250     |

Static spread

| Property                         | Value            | Unit | Test standard |
|----------------------------------|------------------|------|---------------|
| Surface Resistivity              | 10 <sup>14</sup> | Ω    | IEC60093      |
| Comparative Tracking Index (CTI) | 600              | V    | IEC 60112     |