



## PE-HD 18x1000 mm natural

|             |          |
|-------------|----------|
| Article No. | P1003275 |
| Category    | PE       |

### Technical Properties

#### Density & Weight

| Property | Value | Unit              | Test standard |
|----------|-------|-------------------|---------------|
| Density  | 0.96  | g/cm <sup>3</sup> | ISO 1183      |

#### Moisture Absorption

| Property                       | Value | Unit | Test standard |
|--------------------------------|-------|------|---------------|
| Water absorption to saturation | 0.01  | %    | ISO 62        |
| Water Absorption to Saturation | 0.01  | %    | ISO 62        |

#### Tensile Properties

| Property                        | Value | Unit | Test standard |
|---------------------------------|-------|------|---------------|
| Tensile Strength                | 20    | MPa  | ISO 527       |
| Modulus of elasticity (tensile) | 1200  | MPa  | ISO 527       |
| Breakdown Voltage               | 13    | MPa  | ISO 527       |
| Break Elongation                | 200   | %    | ISO 527       |

#### Flexural Properties

| Property          | Value | Unit | Test standard |
|-------------------|-------|------|---------------|
| Flexural Strength | 20    | MPa  | ISO527-2      |

#### Impact Resistance

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

| Property                         | Value | Unit              | Test standard |
|----------------------------------|-------|-------------------|---------------|
| Notched impact strength (Charpy) | 7.5   | kJ/m <sup>2</sup> | ISO 179/1eA   |
| Impact Resistance (Charpy)       | 15    | kJ/m <sup>2</sup> | ISO 179/1eU   |

### Hardness

| Property               | Value | Unit      | Test standard |
|------------------------|-------|-----------|---------------|
| Hardness Shore D       | 60    | ° Shore D | shore D       |
| Ball pressure hardness | 50    | MPa       | ISO 2039-1    |

### Temperature Limits

| Property                                   | Value | Unit | Test standard |
|--|-------|------|---------------|
| Melting point                              | 135   | °C   | ISO 3146      |
| Maximal operating temperature (short-term) | 95    | °C   | UL746B        |
| Maximum Operating Temperature              | 76    | °C   |               |
| Minimum temperature                        | -51   | °C   |               |
| Heat deflection temperature (HDT/A)        | 45    | °C   | ISO 75-2      |
| Heat deflection temperature (HDT/B)        | 69    | °C   | ISO 75        |
| Vicat softening temperature (VST/B/50)     | 79    | °C   | ISO 306       |

### Thermal Conductivity

| Property             | Value | Unit    | Test standard |
|----------------------|-------|---------|---------------|
| Thermal Conductivity | 0.4   | W/(m·K) | DIN 52612     |

### Thermal Expansion

| Property                      | Value | Unit                | Test standard |
|-------------------------------|-------|---------------------|---------------|
| Thermal Expansion Coefficient | 2     | 10 <sup>-4</sup> /K | ISO 11359     |

### Insulation Properties

| Property                        | Value            | Unit  | Test standard |
|---------------------------------|------------------|-------|---------------|
| Dielectric Strength             | 45               | kV/mm | IEC 60243-1   |
| Volume Resistivity              | 10 <sup>12</sup> | Ω·cm  | EN 61340-5-1  |
| Dielectric Constant (1 MHz)     | 2.4              | -     | IEC 60250     |
| Dielectric Constant (100 Hz)    | 2.3              | -     | IEC 60250     |
| Dielectric loss factor (1 MHz)  | 0.0              | -     | IEC 60250     |
| Dielectric loss factor (100 Hz) | 0.0              | -     | IEC 60250     |

## Static spread

| Property                         | Value                  | Unit     | Test standard |
|----------------------------------|------------------------|----------|---------------|
| Surface Resistivity              | <b>10<sup>13</sup></b> | <b>Ω</b> | EN 61340-5-1  |
| Comparative Tracking Index (CTI) | <b>600</b>             | <b>V</b> | IEC 60112     |