

**Material datasheet**  
**Material: PAS-PE5 ELS schwarz (black)**

**mechanical characteristics**

| Characteristic                              | Standard                                | Unit                     | Value    |
|---------------------------------------------|-----------------------------------------|--------------------------|----------|
| Yield stress (+23°C, dry)                   | ISO 527-1/-2<br>DIN 53455<br>ASTM D 638 | MPa (N/mm <sup>2</sup> ) | 28       |
| Yield strain (dry)                          | ISO 527-1/-2<br>DIN 53455<br>ASTM D 638 | %                        | 5        |
| Elongation at break (+23°C, dry)            | ISO 527-1/-2<br>DIN 53455<br>ASTM D 638 | %                        | 650      |
| Tensile E-modulus (+23°C, dry)              | ISO 527-1/-2<br>DIN 53455<br>ASTM D 638 | MPa (N/mm <sup>2</sup> ) | 1100     |
| Max. permissible pressure load (continuous) | Faigle                                  | MPa (N/mm <sup>2</sup> ) | 7        |
| Charpy impact strength (+23°C, dry)         | ISO 179<br>DIN 53453                    | kJ/m <sup>2</sup>        | No Break |
| Charpy notched impact strength (+23°C, dry) | ISO 179<br>DIN 53453                    | kJ/m <sup>2</sup>        | 25       |
| Ball indentation hardness (dry)             | ISO 2039-1                              | MPa (N/mm <sup>2</sup> ) | 50       |

**thermal characteristics**

| Characteristic                                      | Standard  | Unit                | Value |
|-----------------------------------------------------|-----------|---------------------|-------|
| min. Operating temperature (continuous)             |           | °C                  | -80   |
| max. service temperature (continuous)               |           | °C                  | 80    |
| max. service temperature (short-term)               |           | °C                  | 100   |
| Coefficient of linear thermal expansion (23 - 60°C) | ISO 11359 | 10 <sup>-6</sup> /K | 200   |
| Thermal conductivity (+23°C)                        | DIN 52612 | W/(m×K)             | 0.4   |

**combustibility characteristics**

| Characteristic    | Standard        | Unit  | Value |
|-------------------|-----------------|-------|-------|
| UL94 flammability | IEC 60695-11-10 | class | HB    |

#### electrical characteristics

| Characteristic            | Standard                                         | Unit     | Value           |
|---------------------------|--------------------------------------------------|----------|-----------------|
| Surface resistivity (dry) | DIN IEC 60093<br>(DIN VDE 0303-30)<br>ASTM D 257 | $\Omega$ | 10 <sup>4</sup> |

#### physical characteristics

| Characteristic                                                      | Standard                            | Unit              | Value |
|---------------------------------------------------------------------|-------------------------------------|-------------------|-------|
| Density, Gross density                                              | ISO 1183<br>DIN 53479<br>ASTM D 792 | g/cm <sup>3</sup> | 0.96  |
| Moisture absorption at saturation - standard climate (23°C, 50% RF) | ISO 62 ISO 1110                     | %                 | 0.1   |
| Water absorption at saturation (water storage 23°C)                 | ISO 62<br>DIN 53495<br>ASTM D 570   | %                 | 0.1   |