



PEEK 5x3000 mm svart

Artikelnr P1500087  
Material PEEK

1. Tekniskt datablad

| Egenskap                                   | Värde            | Enhet   | Standard    |
|--------------------------------------------|------------------|---------|-------------|
| Density                                    | 1.31             | g/cm³   | ISO 1183    |
| Tensile Strength                           | 112              | MPa     | ISO527-2    |
| Modulus of elasticity (tensile)            | 4400             | MPa     | ISO 527-2   |
| Breakdown Voltage                          | 67               | MPa     | ISO 527     |
| Break Elongation                           | 20               | %       | ISO 527-2   |
| Melting point                              | 340              | °C      | ISO 3146    |
| Maximal operating temperature (short-term) | 291              | °C      | UL746B      |
| Maximum Operating Temperature              | 245              | °C      |             |
| Minimum temperature                        | -35              | °C      |             |
| Heat deflection temperature (HDT/A)        | 160              | °C      | ISO 75-2    |
| Heat deflection temperature (HDT/B)        | 240              | °C      | ISO 75      |
| Vicat softening temperature (VST/B/50)     | 50               | °C      | ISO 306     |
| Dielectric Strength                        | 24               | kV/mm   | IEC 60243-1 |
| Volume Resistivity                         | 10 <sup>14</sup> | Ω·cm    | IEC 60093   |
| Dielectric Constant (1 MHz)                | 3.6              | -       | IEC 60250   |
| Dielectric Constant (100 Hz)               | 3.2              | -       | IEC 60250   |
| Dielectric loss factor (1 MHz)             | 0.0              | -       | IEC 60250   |
| Dielectric loss factor (100 Hz)            | 0.0              | -       | IEC 60250   |
| Flammability Classification (UL 94)        | 0                |         | UL 94       |
| Flexural Strength                          | 110              | MPa     | ISO 527-2   |
| Thermal Conductivity                       | 0.25             | W/(m·K) | DIN 52612   |
| Surface Resistivity                        | 10 <sup>13</sup> | Ω       | IEC 60093   |
| Comparative Tracking Index (CTI)           | 150              | V       | IEC 60112   |
| Water absorption to saturation             | 0.2              | %       | ISO 62      |
| Water Absorption to Saturation             | 0.45             | %       | ISO 62      |

| Egenskap                         | Värde | Enhet               | Standard       |
|----------------------------------|-------|---------------------|----------------|
| Notched impact strength (Charpy) | 3.5   | kJ/m²               | ISO 179/1eA    |
| Impact Resistance (Charpy)       | 92    | kJ/m²               | ISO179/1eU     |
| Thermal Expansion Coefficient    | 0.5   | 10 <sup>-4</sup> /K | DIN 11359      |
| Hardness Shore D                 | 90    | ° Shore D           | DIN EN ISO 868 |
| Ball pressure hardness           | 230   | MPa                 | ISO 2039-1     |

## 2. Kemisk beständighet

● Beständig
 ● Delvis beständig
 ● Ej beständig

| Kemikalie                             | Konc. | Resultat |
|---------------------------------------|-------|----------|
| 1,4-Dioxane                           | 100   | ●        |
| 2-Hydroxypropionic acid (lactic acid) | 90    | ●        |
| Acetic acid                           | 100   | ●        |
| Acetone                               | 100   | ●        |
| Ammonia                               | -     | ●        |
| Ammonium chloride                     | -     | ●        |
| Amyl alcohol                          | -     | ●        |
| Apple juice                           | -     | ●        |
| Benzene                               | -     | ●        |
| Boric acid                            | 100   | ●        |
| Brake fluid                           | -     | ●        |
| Butyl acetate                         | -     | ●        |
| Calcium chloride                      | -     | ●        |
| Carbon tetrachloride                  | -     | ●        |
| Chlorine (gas)                        | 100   | ●        |
| Chlorobenzene                         | 100   | ●        |
| Chloroform                            | -     | ●        |
| Citric acid                           | 10    | ●        |
| Cyclohexanone                         | 100   | ●        |
| Cyclohexene                           | 100   | ●        |
| Diesel                                | -     | ●        |
| Diethylene oxide                      | -     | ●        |
| Ethyl acetate                         | 100   | ●        |
| Ethyl alcohol (ethanol)               | 96    | ●        |
| Ethylene chloride                     | 100   | ●        |
| Food oil                              | -     | ●        |

| Kemikalie                        | Konc. | Resultat |
|----------------------------------|-------|----------|
| Formaldehyde (aqueous)           | 40    | ●        |
| Formic acid                      | 10    | ●        |
| Frost protection agent           | -     | ●        |
| Fuel oil                         | -     | ●        |
| Fuel, aromatic free              | -     | ●        |
| Glycerine                        | 100   | ●        |
| Glycol                           | 100   | ●        |
| Heptane                          | 100   | ●        |
| Hydrochloric acid                | 10    | ●        |
| Hydrochloric acid (concentrated) | -     | ●        |
| Hydrofluoric acid                | 40    | ●        |
| Hydrogen peroxide                | 10    | ●        |
| Hydrogen sulfide (aqueous)       | -     | ●        |
| Isopropyl alcohol                | 100   | ●        |
| Linseed oil                      | -     | ●        |
| Mercurochrome                    | -     | ●        |
| Methyl alcohol (methanol)        | 100   | ●        |
| Methyl ethyl ketone (MEK)        | 100   | ●        |
| Methylene chloride               | 100   | ●        |
| Milk                             | -     | ●        |
| Mineral oils (aromatic free)     | -     | ●        |
| Nitric acid                      | 10    | ●        |
| Nitric acid                      | 50    | ●        |
| Nitrobenzene                     | -     | ●        |
| Oxalic acid                      | -     | ●        |
| Ozone (gas)                      | -     | ●        |
| Paraffin oil                     | 100   | ●        |
| Perchloroethylene                | -     | ●        |
| Petroleum                        | 100   | ●        |
| Petroleum ether                  | 100   | ●        |
| Phenol (aqueous)                 | 9     | ●        |
| Phosphoric acid                  | 50    | ●        |
| Potassium hydroxide solution     | 50    | ●        |
| Premium fuel                     | -     | ●        |

| Kemikalie                                | Konc. | Resultat |
|------------------------------------------|-------|----------|
| Propyl alcohol                           | -     | ●        |
| Pyridine                                 | -     | ●        |
| Silicone oil                             | -     | ●        |
| Sodium carbonate (aqueous)               | -     | ●        |
| Sodium chloride (aqueous)                | -     | ●        |
| Sodium hydrogen sulfite                  | -     | ●        |
| Sodium hydroxide solution (caustic soda) | 60    | ●        |
| Sodium hydroxide solution (caustic soda) | 15    | ●        |
| Sodium nitrate (aqueous)                 | -     | ●        |
| Sodium thiosulfate                       | -     | ●        |
| Sulphuric acid                           | 96    | ●        |
| Tetrahydrofuran (THF)                    | 100   | ●        |
| Toluene                                  | 100   | ●        |
| Transformer oil                          | -     | ●        |
| Trichloroethylene                        | 100   | ●        |
| Vinegar (standard)                       | 5-10  | ●        |
| Water                                    | -     | ●        |
| Xylene                                   | -     | ●        |