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## Technical Data Sheet

In the following, the typical physical properties of a material developed by Eisenhuth GmbH & Co. KG, made of a graphite-polymer composite material (compound), are listed below.

**Material: PPS**

**Identification No.: 02-05-03-85-81-4-0-01**

**Polymer: Polyphenylene sulfide (PPS)**

**Physical Properties (Typical Values):**

Property	Unit	Value
Density	$\text{g}\cdot\text{cm}^{-3}$	2
Flexural Strength <sup>A</sup>	$\text{N}\cdot\text{mm}^{-2}$	48
Flexural Modulus <sup>A</sup>	$\text{N}\cdot\text{mm}^{-2}$	18000
Tensile Strength <sup>B</sup>	$\text{N}\cdot\text{mm}^{-2}$	25
Tensile Modulus <sup>B</sup>	$\text{N}\cdot\text{mm}^{-2}$	14000
Fracture Elongation <sup>A, B</sup>	%	0.3 – 0.2
Thermal Conductivity <sup>C</sup>	$\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$	20
Thermal Expansion Coefficient <sup>D</sup>	$\text{K}^{-1}\cdot 10^{-6}$	42
Specific Electrical Resistance <sup>E</sup>	$\Omega\cdot\text{cm}$	0.008
Specific Electrical Resistance <sup>F</sup>	$\Omega\cdot\text{cm}$	0.060
Electrical Resistance <sup>E</sup>	$\text{m}\Omega$	6
Recommended maximal Operating Temperature <sup>G</sup>	$^{\circ}\text{C}$	<200

A According to DIN EN ISO 178

B According to ISO 572

C By 25°C Through-Plane

D According to ISO 11359-2 Through-Plane

E By 25°C In-Plane

F Vertical to the panel plane at a contact pressure of 2.5N/cm<sup>2</sup>

G Derived from heat deflection temperature according to ISO 75-2

The typical values are updated during production and are based on the current state of information. They provide a general overview of the products and their applications. They are not guaranteed properties or suitability for extraordinary applications of the described products. All rights of use must be observed.