テクニカルデータシート

Sustason® PPSU natural

PPSU

製品の特徴

- 高熱たわみ温度
- 煙の発生が極めて少ない
- 高い引張強度
- 非常に高いクリープ破断強度
- 良好な機械加工性
- 優れた接着性
- 良好な溶接性
- 高い連続使用温度
- 電気絶縁性
- 優れた絶縁耐力
- 高い剛性
- 優れた熱成形性
- 良好な衝撃強度
- 優れた寸法安定性

製品の用途例

- エレクトロニクス
- ヘルスケア
- 機械工学

	試験法	単位	値
一般的物性			
密度	DIN EN ISO 1183-1	g / cm^3	1,29
吸水率	DIN EN ISO 62	%	0,6
燃焼性 (厚み 3 mm / 6 mm)	UL 94		V0 / V0
機械的物性			
引張降伏応力	DIN EN ISO 527	MPa	77
引張破壊呼び歪	DIN EN ISO 527	%	30
引張弾性率	DIN EN ISO 527	MPa	2500
ノッチ付き衝撃耐性	DIN EN ISO 179	kJ / m^2	10
熱的物性			
融点	ISO 11357-3	°C	-
ガラス転移温度	ISO 11357-3	°C	220
熱伝導率	DIN 52612-1	W / (m * K)	0,35

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	試験法	単位	値
線膨張係数	DIN 53752	10^{-6} / K	55
使用温度（長期）	平均値	°C	-50 … 180
使用温度（短期、最大）	平均値	°C	210
荷重たわみ温度	DIN EN ISO 75, Verf. A, HDT	°C	205
電気的物性			
誘電率	IEC 60250		3,44
体積固有抵抗	DIN EN 62631-3-1	Ω * cm	10^{15}
絶縁破壊電圧	IEC 60243	kV / mm	15

The short-term maximum application temperature only applies to very low mechanical stress for a few hours. The long-term maximum application temperature is based on the thermal ageing of plastics by oxidation, resulting in a decrease of the mechanical properties. This applies to an exposure to temperatures for at least 5.000 hours causing a 50% loss of the tensile strength from the original value (measured at room temperature). This value says nothing about the mechanical strength of the material at high application temperatures. In case of thick-walled parts, only the surface layer is affected by oxidation from high temperatures. With the addition of antioxidants, a better protection of the surface layer is achieved. In any case, the center area of the material remains unaffected. The minimum application temperature is basically influenced by possible stress factors like impact and/or shock under application. The values stated refer to an minimum degree of impact stress. The electrical properties as stated result from measurements on natural, dry material. With other colours (in particular black) or saturated material, there may be clear differences in the electrical properties. The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860. They serve as information about our products and are presented as a guide to choose from our range of materials. This, however, does not include an assurance of specific properties or the suitability for particular application purposes that are legally binding. Since the properties also depend on the dimension of the semi-finished products and the degree of crystallization (e.g. nucleating by pigments), the actual values of the properties of a particular product may differ from the indicated values.