fluorseals spa®
prodotti in p.t.f.e.

MATERIAL SPECIFICATION

TYPICAL PROPERTIES

PRODUCT

fluteck® S100

(Compression moulded Polysulfone)

	Property	Method	Units	Specification
Physical	Specific gravity	ASTM D 792	g/cm^3	1,24
	Water absorption, 24 hours	ASTM D 570	%	0,3
	Mold shrinkage, along flow	ASTM D 955	%	0,7
Mechanical	Elongation at break	ASTM D 638	%	30-80
	Tensile strength, at 23℃	ASTM D 638	MPa	60-75
	Tensile modulus, at 23℃	ASTM D 638	GPa	2-2,5
	Izod impact strength (notched)	ASTM D 256	J/m	68
	Hardness Rockwell (M scale)	ASTM D 785	Rockwell	≥75
	Hardness Shore	ASTM D 2240	Shore D	≥79
Thermal	Glass temperature	ASTM D3418	℃	187
	Deflection Temperature, 1.8MPa unannealed	ASTM D648	℃	174
	Thermal conductivity at 23℃	DSC	W/mK	0.26
	Maximum service Temperature, Air	Internal Test	℃	175
	Linear Coefficient of Expansion, 25℃	ASTM D696	10^{-5} / ℃	5.5
	Oxygen Index,LOI	ASTM D2863	%	35
Electrical	Dielectic strength	ASTM D149	kV/mm	17
	Volume resistivity	ASTM D257	Ohm*cm	$>10^{16}$
	Dielectric constant, at 23℃ 60 Hz 1kHz 1MHz	ASTM D150	-	 3.03 3.04 3.02
	Dissipation factor, at 23℃ 60 Hz 1kHz 1MHz	ASTM D150		 0.0007 0.001 0.006

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MATERIAL SPECIFICATION

TYPICAL PROPERTIES

fluteck® S100– (Compression molding PSU)

General features:

- FDA 21 CFR 177.1655 Compliant
- RoHS Compliant
- High Heat Resistance
- Low Permeability
- Good Dimensional Stability at High Temperature
- Very good Electrical Strength
- Good Toughness
- Very good alternative to Brass
- Resistance to High Energy Radiation (Gamma)
- Good Chemical Resistance
- Radiotranslucent
- Good Sterilizability
- Good Surface Finish
- Low flammability
- Biocompatible
- Thermoprocessable

Note: The information contained in this technical data sheet are based on our experience to date and we believe it to be reliable. It is intended only as a guide for use at your own discretion. We can not guarantee favourable results and assume no liability in connection with its use or the use of the products described. None of this information is to be taken as a licence to operate under, or a recommendations to infringe any existing patents. Prior to any application the above product has to be tested and accepted by the processor.
In order to complete this data sheet, you can require us a DSC / TGA analysis and a microscope picture on our website http://www.fluteck.com

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