



# Sustason PSU (Polysulfone)

Semi-transparent, amorphous thermoplastic

SUSTASON PSU (Polysulfone) is a semi-transparent amorphous thermoplastic with an amber tint. It is a logical progression from standard transparent plastics such as polycarbonate when improved chemical or higher temperature resistance is required by the application. SUSTASON PSU can be used continuously in hot water and steam sterilization and has excellent chemical resistance to acidic salt solutions.

**Product Features:**

- ⊕ Excellent electrical properties
- ⊕ Autoclavable
- ⊕ Water, food and medical compliance
- ⊕ Stiffness, strength and dimensional stability
- ⊕ Continuous use temperature of 300°F
- ⊕ Maintains its properties over a wide temperature range
- ⊕ FDA compliant
- ⊕ Heat deflection temperature of 345°F

**Typical Properties of Stock Shapes**

Property	Units	Test Method	Value Natural
Specific Gravity	-	ASTM D 792	1.24
Water Absorption 24 hrs	%	ASTM D 570	0.3
Water Absorption Saturation	%	ASTM D 570	0.6
Flammability	-	UL 94	V-0
Tensile Strength	psi	ASTM D 638	10,200
Elongation	%	ASTM D 638	30
Modulus	psi	ASTM D 638	360,000
Flexural Strength	psi	ASTM D 790	15,400
Modulus	psi	ASTM D 790	390,000
Notched Izod	ft-lb/in	ASTM D 256	1.3
Rockwell Hardness	-	ASTM D 785	M75
HDT @ 264 psi	°F	ASTM D 648	345
Coefficient Linear thermal expansion	in/in/°F	ASTM D 696	3.1 x 10 <sup>-5</sup>
Dielectric Strength	V / mil	ASTM D 149	425
Volume Resistivity	ohm-cm	ASTM D 257	5.0 x 10 <sup>18</sup>
Dielectric Constant	-	ASTM D 150	3.06

**Typical Applications**

- ⊕ Electrical/electric components
- ⊕ Medical devices
- ⊕ Manifolds
- ⊕ Valves
- ⊕ Industrial parts

**Certifications**

- ⊕ ASTM D6394 SP 0111
- ⊕ MIL-P-46120B Type 1 Class 1
- ⊕ FDA & USDA
- ⊕ FDA 21 CFR 177.1630

