

## FORMPLAST® 2000 - Stock Shapes (rods, plates, tubes)

### Chemical Designation

PU (Polyurethane)

### Colour

light blue

### Density

1.2 g/cm<sup>3</sup>

### Main features

- excellent impact strength
- high toughness
- easily machinable to tight tolerance
- very good mechanical strength

### Target Industries

- packaging and paper machinery

Mechanical properties	condition	value	unit	test method	comment	
Modulus of elasticity (tensile test)	1% Sec, @ 73 °F	260,000	psi	ASTM D 638		
Tensile strength at yield	@ 73 °F	10,000	psi	ASTM D 638		
Flexural strength	@ 73 °F	13,000	psi	ASTM D 790		
Modulus of elasticity (flexural test)	Tangent @ 73 °F	320,000	psi	ASTM D 790		
Compression strength	@ 73 °F	12,000	psi	ASTM D 695		
Impact strength (Izod)	@ 73 °F	7.0	ft-lbs/in	ASTM D 256		
Thermal properties	condition	value	unit	test method	comment	
Vicat softening point		291	°F	-	1)	(1) publicly sourced data
Deflection temperature	@264 psi, 1/4	241	°F	ASTM D 648	2)	(2) publicly sourced data
Service temperature	Long Term	280	°F	-	3)	(3) Injection molded data
Thermal expansion (CLTE)		3.7*10 <sup>-5</sup>	in/in/°F	ASTM D 696	4)	(4) publicly sourced data
Specific heat		0.26	BTU/lb-F°	-	5)	(5) publicly sourced data
Thermal conductivity		0.322	W/(K*m)	-	6)	(6) publicly sourced data

→ Resin specification:  
Ensinger Internal Specification  
Shapes specification:  
NONE

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