

HYDEX® 202 natural - Stock Shapes (rods, plates, tubes)

Chemical Designation

PU (Polyurethane)

Colour

beige

Density

1.2 g/cm³

Main features

- high dimensional stability
- broad chemical compatibility
- good impact strength
- good mechanical properties
- easy to machine

Target Industries

- medical technology
- chemical technology
- fixture construction
- pharmaceutical industry
- oil and gas industry
- process engineering

Mechanical properties	condition	value		test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	240,000	psi	ASTM D 638	
Tensile strength at yield	@ 73 °F	9000	psi	ASTM D 638	
Tensile strength at break	@ 73 °F	8000	psi	ASTM D 638	
Elongation at break (tensile test)	@ 73 °F	80	%	ASTM D 638	
Flexural strength	@ 73 °F	12,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	260,000	psi	ASTM D 790	
Compression strength	@ 73 °F, 1% strain	1,200	psi	ASTM D 695	
Compression strength	@ 73 °F, 10% strain	12,000	psi	ASTM D 695	
Compression modulus	@ 73 °F	180,000	psi	ASTM D 695	
Impact strength (Izod)	@ 73 °F	10	ft-lbs/in	ASTM D 256	
Rockwell hardness	M Scale	88		ASTM D 785	
Coefficient of friction	Static (vs. steel)	0.26		ASTM D 3702	
Coefficient of friction	Dynamic (vs. steel)	0.22		ASTM D 3702	
Thermal properties	condition	value		test method	comment
Vicat softening point		292	°F	ASTM D 1525	
Deflection temperature	@ 66 psi	290	°F	ASTM D 648	
Deflection temperature	@264 psi	280	°F	ASTM D 648	
Service temperature		280	°F	-	
Thermal expansion (CLTE)		3.7*10 ⁻⁵	in/in/°F	ASTM D 696	
Other properties	condition	value		test method	comment
Moisture absorption	@ 24 hrs, 73 °F	0.12	%	ASTM D 570	

→ Resin specification:
Ensinger Internal Specification
Shapes specification:
NONE

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Ensinger Inc. Headquarters
365 Meadowlands Boulevard
Washington, PA 15301, USA

Phone 800-243-3221 Sales
Phone 800-869-4029 Technical
Fax 724-746-9209
sales@ensingerusa.com

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