

TECAFINE® HDPE natural - Stock Shapes (rods, plates, tubes)

Chemical Designation

PE (Polyethylene)

Colour

white translucent

Density

0.95 g/cm³

Main features

- broad chemical compatibility
- easy to machine
- good impact strength
- low moisture absorption

Target Industries

- food processing
- food engineering
- conveyor technology
- chemical technology
- automotive industry
- home appliances

Mechanical properties	condition	value	unit	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	140,000	psi	ASTM D 638	
Tensile strength at yield	@ 73 °F	3,700	psi	ASTM D 638	
Elongation at break (tensile test)	@ 73 °F	>100	%	ASTM D 638	
Flexural strength	@ 73 °F	4,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	140,000	psi	ASTM D 790	
Impact strength (Izod)	@ 73 °F	1.94	ft-lbs/in	ASTM D 256	
Rockwell hardness	R Scale	54		ASTM D 785	
Shore hardness	D Hardness	67		ASTM D 2240	
Thermal properties	condition	value	unit	test method	comment
Vicat softening point		261	°F	ASTM D 1525	1) (1) publicly sourced resin data
Deflection temperature	@ 66 psi	167	°F	ASTM D 648	2) (2) publicly sourced resin data
Service temperature	Long Term Max	248	°F	-	3) (3) publicly sourced resin data
Service temperature	Brittleness Temperature	-105	°F	-	4) (4) ASTM D 746 publicly sourced resin data
Thermal expansion (CLTE)		6.5	*10 ⁻⁵ in/in/°F	ASTM D 696	5) (5) publicly sourced resin data

→ Resin specification:
ASTM D4976-06 PE235
Shapes specification:
NONE

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