

Housewares material selector guide



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Product	Attributes					Specific gravity ASTM D792	Deflection temperature, °C (°F) ASTM D648	
	Dishwasher safe	Thick parts	Long flow length	Toughness	Other		@ 1.82 MPa (264 psi)	@ 0.455 MPa (66 psi)
Injection molded								
Eastar™ copolyester GN007	No	●	◐	◑	Thick-wall clarity	1.27	62 (143)	70 (158)
Eastar™ copolyester DN011	No	○	◐	●	No break Notched izod	1.23	64 (147)	73 (163)
DuraStar™ polymer DS1010	No	◐	◑	◑	Improved drying	1.20	65 (149)	75 (167)
DuraStar™ polymer DS1910HF	No	○	●	◑	Thin parts Good color	1.19	66 (150)	73 (163)
Eastman Tritan™ copolyester TX1001	Yes	◑	◐	●		1.18	85 (185)	99 (210)
Eastman Tritan™ copolyester TX1501HF	Yes	◑	●	●		1.18	81 (178)	94 (201)
Eastman Tritan™ copolyester TX2001	Yes	●	◑	●		1.17	92 (198)	109 (228)
Extrusion blow molded								
Eastar™ copolyester GN078	No	◑	N/A	◑	Large bottles	—	63 (145)	73 (163)
Eastman Tritan™ copolyester TX2001	Yes	●	◑	●	Small bottles	1.17	92 (198)	109 (228)
Eastman Tritan™ copolyester TX1800	Yes	◑	◐	●	Large bottles	1.18	85 (185)	101 (214)
Injection stretch blow molded								
Eastar™ copolyester EN076	No	○	◐	◐	Promotional market	1.32	62 (144)	69 (156)
Eastar™ copolyester DN011	No	○	◐	●		1.23	64 (147)	73 (163)
Eastman Tritan™ copolyester TX1001	Yes	●	◑	●		1.18	85 (185)	99 (210)

● = Best ◑ = Better ◐ = Good ○ = Poor

Optical properties ASTM D1003		Flexural modulus MPa (10 ⁵ psi) ASTM D790	Notched izod impact @ 23°C (73°F) J/m (ft-lbf/in.) ASTM D256	Tensile properties at yield ASTM D638		Tensile properties at break ASTM D638	
Transmittance %	Haze %			% Elongation	Stress MPa (psi)	% Elongation	Stress MPa (psi)
90	0.2	2,060 (3.0)	105 (1.9)	4.4	50 (7,200)	180	30 (4,300)
92	<1.0	1,800 (2.6)	NB	4	44 (6,300)	330	54 (7,800)
91	0.3	2,000 (2.9)	80 (1.5)	5	47 (6,900)	300	51 (7,400)
92	<1.0	1,900 (2.7)	80 (1.5)	5	50 (7,200)	270	43 (6,300)
90	<1.0	1,550 (2.25)	980 (18.4)	6	43 (6,200)	210	53 (7,700)
91	<1.0	1,575 (2.28)	860 (16.1)	7	43 (6,200)	210	52 (7,500)
92	<1.0	1,585 (2.28)	650 (12.2)	7	44 (6,400)	140	53 (7,700)
91	1.3	1,900 (2.7)	NB	5	47 (6,900)	300	48 (7,000)
92	<1.0	1,585 (2.28)	650 (12.2)	7	44 (6,400)	140	53 (7,700)
91	<1.0	1,522 (2.2)	842 (15.8)	7	45 (6,500)	139	52 (7,600)
89	0.8	2,350 (3.4)	67 (1.2)	4	56 (8,100)	75	26 (3,800)
92	<1.0	1,800 (2.6)	NB	4	44 (6,300)	330	54 (7,800)
90	<1.0	1,550 (2.25)	980 (18.4)	6	43 (6,200)	210	53 (7,700)



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