

Material selector guide

Injection molding for
the personal care market



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Product	Appearance/ finish	Specific gravity ASTM D792	Deflection temperature °C (°F) ASTM D648		Optical properties ASTM D1003		Flexural modulus MPa (10 ⁵ psi) ASTM D790
			@ 1.82 MPa (264 psi)	@ 0.455 MPa (66 psi)	Transmittance %	Haze %	
Estar™ copolyesters							0.125 in. thickness
CN005	Clear transparent, high gloss	1.20	63 (145)	71 (160)	90	<0.60	1,800 (2.6)
EB062		1.25	63 (145)	73 (163)	91	1.30	1,900 (2.7)
EN067		1.32	61 (142)	66 (151)	84	—	2,600 (3.8)
GN007 ^a		1.27	62 (143)	70 (158)	90	0.2	2,060 (3.0)
GN071 ^a		1.27	66 (150)	70 (158)	90	0.2	2,060 (3.0)
5011 ^a		1.28	62 (143)	67 (152)	85	0.3	2,200 (3.2)
DN011	Clear transparent, high gloss	1.23	64 (147)	73 (163)	92	<1.00	1,800 (2.6)
AN004		1.20	65 (149)	73 (164)	91	0.3	2,000 (2.9)
AN014		1.19	66 (150)	73 (163)	92	<1.00	1,900 (2.7)
EN076		1.32	62 (144)	69 (156)	89	0.8	2,350 (3.4)
Eastman Cristal™ copolyester							
Cristal 400	Extremely clear, high gloss	1.28	61 (142)	68 (155)	92	0.24	1,810 (2.6)
Eastman Tritan™ copolyesters							
LX101	Clear transparent, high gloss	1.18	99 (210)	85 (185)	90	<1.00	1,550 (2.25)
LX151HF		1.18	81 (178)	94 (201)	91	<1.00	1,575 (2.8)
LX201		1.17	92 (198)	109 (228)	92	<1.00	1,585 (2.28)

^aData are based on limited testing.

^bNonbreak as defined in ASTM D256 using 854 J/m (16 ft·lbf/in.) capacity pendulum with 3.2-mm (1/8-in.) specimens.

Unless noted otherwise, all tests were run @ 23°C (73°F) and 50% relative humidity.

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

Conversions of metric/U.S. customary values may have been rounded off and therefore may not be exact conversions.

Rockwell hardness (R Scale) ASTM D785	Notched Izod impact @ 23°C (73°F) J/m (ft•lbf/in.) ASTM D256	Tensile yield ASTM D638		Tensile break ASTM D638	
		Elongation %	Stress MPa (psi)	Elongation %	Stress MPa (psi)
105	70 (1.3)	4.5	50 (7,210)	193	35 (6,240)
105	NB	5	47 (6,900)	300	48 (7,000)
110	58 (1.1)	4	57 (8,200)	134	24 (3,500)
108	105 (1.9)	4.4	50 (7,200)	180	30 (4,300)
108	105 (1.9)	4.4	50 (7,200)	180	30 (4,300)
106	69 (1.3)	—	—	30	25 (3,600)
105	NB ^b	4	44 (6,300)	330	54 (7,800)
103	80 (1.5)	5	47 (6,900)	320	51 (7,400)
107	80 (1.5)	5	50 (7,200)	270	43 (6,300)
111	67 (1.2)	4	56 (8,100)	75	26 (3,800)
102	104 (1.9)	4.4	50 (7,210)	38	25 (3,600)
112	980 (18.4)	6	43 (6,200)	210	53 (7,700)
111	860 (16.1)	7	43 (6,200)	210	52 (7,500)
115	650 (12.2)	7	44 (6,400)	140	53 (7,700)



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