

# Consumer markets

Material selector guide

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Product	Description	Appearance/finish	Representative markets/applications	Specific gravity ASTM D792	Deflection temperature, °C (°F) ASTM D648		Optical properties ASTM D1003		Flexural modulus MPa (10 <sup>5</sup> psi) ASTM D790	Notched Izod impact @ 23°C (73°F) J/m (ft-lbf/in.) ASTM D256	Tensile stress ASTM D638		Tensile stress ASTM D638		
					@ 1.82 MPa (264 psi)	@ 0.455 MPa (66 psi)	Transmittance %	Haze %			% Elongation	Yield MPa (psi)	% Elongation	Break MPa (psi)	
<b>DuraStar™ polymers</b>															
DS1010	Copolyester	Clear, transparent, high gloss	Ophthalmic frames, toys, housewares, writing instruments	1.20	65 (149)	75 (167)	91	0.3	2,000 (2.9)	80 (1.5)	5	47 (6,900)	300	51 (7,400)	
DS1910HF				1.19	66 (150)	73 (163)	92	<1	1,900 (2.7)	81 (1.5)	5	50 (7,200)	270	43 (6,300)	
DS2010				1.20	65 (149)	73 (164)	91	0.3	1,900 (2.75)	370 (7.0)	5	46 (6,700)	310	53 (7,700)	
<b>Eastar™ copolyesters</b>															
<b>0.125 Thickness<sup>a</sup></b>															
DN011	Copolyester	Clear, transparent, high gloss	Toys, housewares, writing instruments	1.23	64 (147)	73 (163)	92	<1.0	1,800 (2.6)	NB <sup>b</sup>	4	44 (6,300)	330	54 (7,800)	
GN007 <sup>c</sup>				1.30	60 (140)	70 (158)	91	0.3	2,200 (3.0)	98 (1.8)	4.3	49 (7,100)	150	30 (4,300)	
GN071 <sup>c</sup>				1.30	61 (140)	70 (158)	91	0.3	2,200 (3.0)	98 (1.8)	4.3	49 (7,100)	150	30 (4,300)	
EN058 <sup>c</sup>				1.33	62 (144)	67 (153)	82	1.3	2,500 (3.6)	43 (0.8)	4.2	58 (8,400)	70	23 (3,400)	
EN067				1.32	61 (142)	66 (151)	84	—	2,600 (3.8)	58 (1.1)	4	57 (8,200)	134	24 (3,500)	
5011 <sup>c</sup>				1.28	62 (143)	67 (152)	85	0.6	2,200 (3.2)	69 (1.3)	—	—	15	25 (3,600)	
GN046				1.27	62 (143)	70 (158)	90	0.6	2,100 (3.0)	94 (1.8)	4	50 (7,300)	110	28 (4,100)	
6763			Beverage packaging, bottles, extrusion blow molding, food packaging	1.27	64 (147)	70 (158)	85	0.8	2,100 (3.0)	101 (1.9)	—	50 (7,300)	130	28 (4,100)	
<b>Tenite™ cellulose</b>															
<b>0.060 in. Thickness<sup>a</sup></b>															
Acetate 105-28	Cellulose acetate (CA)	Clear Transparent, high gloss	Ophthalmics	1.27	70 (158)	81 (178)	>90	<8.5	2,000 (2.9)	195 (3.7)		31 (4,500)	30	35 (5,000)	
Butyrate 485-10	Cellulose acetate butyrate (CAB)		Sporting equipment	1.19	74 (165)	85 (185)	>90	<8.5	1,379 (2.0)	240 (4.5)		33.1 (4,800)	50	43.4 (6,300)	
Butyrate 485-16			Profiles	1.17	64 (147)	77 (171)	>90	<8.5	1,103 (1.6)	331 (6.2)		25.5 (3,700)	50	33.8 (4,900)	
Butyrate 530-13			Tool handles	1.18	69 (156)	81 (178)	>90	<8.5	1,241 (1.8)	283 (5.3)		29.0 (4,200)	50	39.3 (5,700)	
Butyrate 572-10			Outdoor signs	1.19	79 (174)	86 (186)	>90	<8.5	1,354 (1.96)	239 (4.5)		34.4 (5,000)	55	40.3 (5,900)	
Butyrate 575-10			Profiles	1.19	74 (165)	85 (185)	>90	<8.5	1,379 (2.0)	240 (4.5)		33.1 (4,800)	50	43.4 (6,300)	
Propionate 360-8	Cellulose acetate propionate (CAP)		Sporting equipment	1.21	80 (176)	90 (194)	>90	<8.5	1,758 (2.55)	314 (4.0)		39.0 (5,700)	45	38.9 (5,700)	
Propionate 360-12			Medical	1.20	75 (167)	83 (181)	>90	<8.5	1,400 (2.1)	416 (7.8)		32 (4,600)	45	33 (4,800)	
Propionate 360-14			Medical	1.20	74 (165)	82 (179)	>90	<8.5	1,345 (1.95)	475 (8.9)		29.3 (4,300)	45	31.7 (4,600)	
Propionate 380-18			Ophthalmics	1.19	67 (153)	77 (171)	>90	<8.5	1,172 (1.7)	523 (9.8)		22.1 (3,200)	35	27.6 (4,000)	
Propionate 377-12			Profiles	1.20	75 (167)	83 (181)	>90	<8.5	1,400 (2.1)	416 (7.8)		32 (4,600)	45	33 (4,800)	
Propionate 380-10	Ophthalmics		1.20	80 (176)	88 (190)	>90	<8.5	1,724 (2.5)	304 (5.7)		37 (5,300)	45	37.9 (5,500)		
<b>Eastman Tritan™ copolyesters</b>															
TX1001	Copolyester		Clear	Consumer durable products	1.18	85 (158)	99 (210)	90	<1		980 (18.4)	6	43 (6200)	210	53 (7,700)
TX2001					1.17	92 (198)	109 (228)	92	<1		650 (12.2)	7	44 (6400)	140	53 (7,700)
TX1501HF		1.18			81 (178)	94 (201)	91	<1		860 (16.1)	7	43 (6200)	210	52 (7,200)	

<sup>a</sup>For additional information on other products, contact your Eastman representative. Also see publications PPD-406 or MBS-670.

<sup>b</sup>Nonbreak as defined in ASTM D256 using 3.2-mm (1/8-in.) specimens.

<sup>c</sup>Data is based on limited testing.

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.

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



**Eastman Chemical Company  
Corporate Headquarters**

P.O. Box 431  
Kingsport, TN 37662-5280 U.S.A.  
Telephone:  
U.S.A. and Canada, 800-EASTMAN (800-327-8626)  
Other Locations, (1) 423-229-2000  
Fax: (1) 423-229-1193

**Eastman Chemical Latin America**

9155 South Dadeland Blvd.  
Suite 1116  
Miami, FL 33156 U.S.A.  
Telephone: (1) 305-671-2800  
Fax: (1) 305-671-2805

**Eastman Chemical B.V.**

Fascinatio Boulevard 602-614  
2909 VA Capelle aan den IJssel  
The Netherlands  
Telephone: (31) 10 2402 111  
Fax: (31) 10 2402 100

**Eastman (Shanghai) Chemical  
Commercial Company, Ltd. Jingan Branch**

1206, CITIC Square  
No. 1168 Nanjing Road (W)  
Shanghai 200041, P.R. China  
Telephone: (86) 21 6120-8700  
Fax: (86) 21 5213-5255

**Eastman Chemical Japan Ltd.**

MetLife Aoyama Building 5F  
2-11-16 Minami Aoyama  
Minato-ku, Tokyo 107-0062 Japan  
Telephone: (81) 3-3475-9510  
Fax: (81) 3-3475-9515

**Eastman Chemical Asia Pacific Pte. Ltd.**

#05-04 Winsland House  
3 Killiney Road  
Singapore 239519  
Telephone: (65) 6831-3100  
Fax: (65) 6732-4930

**[www.eastman.com](http://www.eastman.com)**

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