

LEXANTM COPOLYMER FST9705

REGION ASIA

DESCRIPTION

 $High\ viscosity\ Proprietary\ Polycarbonate\ Ester,\ OSU\ 55/55\ compliant,\ low\ smoke,\ flame\ retardant\ resin$

TYPICAL PROPERTY VALUES

Revision 20230607

MECHANICAL. ¹⁰ Torsile Stress, bit, Type I, 50 mm/min 72 ASTM D638 Tensile Stress, bit, Type I, 50 mm/min 73 Mªa ASTM D638 Tensile Strain, bit, Type I, 50 mm/min 6.7 % ASTM D638 Tensile Strain, bit, Type I, 50 mm/min 102 % ASTM D638 Tensile Modulus, 5 mm/min 201 M²a ASTM D790 Flexural Stress, yield, 13 mm/min, 50 mm span 115 M²a ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 74 M²a ASTM D790 Tensile Stress, yield, 50 mm/min 6.8 % D527 Tensile Stress, pieds, 50 mm/min 6.8 % D527 Tensile Stress, pieds, 50 mm/min 6.8 % D527 Tensile Stress, pieds, 20 mm/min 109 M²a D527 Tensile Modulus, 1 mm/min 109 M²a D507 Flexural Modulus, 2 mm/min 109 M²a D507 Flexural Modulus, 2 mm/min 100 M²a D507 Flexural Modulus, 2 mm/min 100 M²a D507	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Stress, brk, Type I, 50 mm/min 73 MPa ASTM D638 Tensile Strain, Juk, Type I, 50 mm/min 6.7 8 ASTM D638 Tensile Strain, Juk, Type I, 50 mm/min 102 8 ASTM D638 Tensile Modulus, 5 mm/min 2610 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 250 MPa ASTM D790 Tensile Strain, byled, 50 mm/min 74 MPa 180 527 Tensile Strain, byled, 50 mm/min 6 MPa 180 527 Tensile Strain, byled, 50 mm/min 6 MPa 180 527 Tensile Strain, byled, 50 mm/min 109 8 180 527 Tensile Strain, byled, 50 mm/min 109 8 180 527 Tensile Modulus, 1 mm/min 109 MPa 180 527 Tensile Strain, byled, 50 mm/min 100 MPa 180 178 Tensile Modulus, 1 mm/min 107 MPa 180 178 Tensile Strain, byled, 50 mm/min 10 MPa 180 178 Tensile Modulus, 1 mm/min 10 10 MPa 180 178	MECHANICAL (1)			
Tensile Strain, Iyd. Type I, 50 mm/min 6.7 8 ASTM 0638 Tensile Strain, Ixf. Type I, 50 mm/min 102 % ASTM 0638 Tensile Modulus, Tommynin 2010 MPa ASTM 0638 Flexural Stress, ydd, 1.3 mm/min, 50 mm span 15 MPa ASTM 0790 Flexural Stress, ydd, 5.0 mm/min 7 MPa ASTM 0790 Tensile Stress, byeld, 5.0 mm/min 6 ASTM 0790 SO 527 Tensile Strain, yeld, 5.0 mm/min 6.8 % SO 527 Tensile Strain, yeld, 5.0 mm/min 109 % SO 527 Tensile Strain, yeld, 5.0 mm/min 109 % SO 527 Tensile Strain, yeld, 5.0 mm/min 109 % SO 527 Tensile Strain, yeld, 5.0 mm/min 109 % SO 527 Tensile Strain, yeld, 5.0 mm/min 109 % SO 527 Tensile Strain, yeld, 5.0 mm/min 109 % SO 527 Tensile Strain, yeld, 5.0 mm/min 10 MPa SO 527 Tensile Strain, break, 5.0 mm/min 10 MPa SO 527	Tensile Stress, yld, Type I, 50 mm/min	72	MPa	ASTM D638
Tensile Strain, brik, Yppe I, 50 mm/min 102 % ASTM D638 Tensile Modulus, 5 mm/min 2610 MPa ASTM D638 Flexural Stress, yld, 1.3 mm/min, 50 mm span 15 MPa ASTM D790 Tensile Stress, yledt, 50 mm/min 74 MPa ASTM D790 Tensile Stress, yledt, 50 mm/min 76 MPa S0 527 Tensile Stress, yledt, 50 mm/min 68 % S0 527 Tensile Stress, break, 50 mm/min 199 % S0 527 Tensile Modulus, 1 mm/min 250 MPa S0 527 Tensile Modulus, 2 mm/min 107 MPa S0 178 Flexural Modulus, 2 mm/min 107 MPa S0 178 Flexural Modulus, 2 mm/min 194 Jm ASTM D256 Izod Impact, notched, 23°C 194 Jm ASTM D3763 Izod Impact, notched, 30°C 112 Jm ASTM D3763 Izod Impact, notched 80°10°4 + 23°C 10 Jm S0 180/14 Cod Impact, notched 80°10°4 + 23°C 10 S0 180/14 Cod Impact, notched 80°10°	Tensile Stress, brk, Type I, 50 mm/min	73	MPa	ASTM D638
Tensile Modulus, 5 mm/min 2610 Mºa ASTM D638 Flexural Stress, yid, 1.3 mm/min, 50 mm span 115 M²a ASTM D790 Flexural Stress, yid, 1.3 mm/min, 50 mm span 74 M²a ASTM D790 Tensile Stress, yield, 50 mm/min 74 M²a SD 527 Tensile Stress, break, 50 mm/min 6.8 % SD 527 Tensile Stresin, bied, 50 mm/min 6.8 % SD 527 Tensile Stresin, bied, 50 mm/min 6.8 % SD 527 Tensile Stresin, bied, 50 mm/min 2500 M²a ISO 527 Tensile Modulus, 1 mm/min 2500 M²a ISO 527 Flexural Stress, yield, 2 mm/min 2500 M²a ISO 178 Flexural Modulus, 2 mm/min 107 M²a ISO 178 Elexural Modulus, 2 mm/min 107 M²a ISO 178 Elexural Stress, yield, 2 mm/min 10 M²a ISO 178 Bedural Total Energy, 23°C 12 J/m ASTM D256 Bedural Total Energy, 23°C 10 J/m ASTM D256 <	Tensile Strain, yld, Type I, 50 mm/min	6.7	%	ASTM D638
Flexural Stress, yild, 1.3 mm/min, 50 mm span 15 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2500 MPa ASTM D790 Tensile Stress, yiled, 50 mm/min 76 MPa ISO 527 Tensile Stress, break, 50 mm/min 68 % 150 527 Tensile Strain, yield, 50 mm/min 109 % 150 527 Tensile Strain, break, 50 mm/min 2500 MPa 150 527 Tensile Strain, break, 50 mm/min 2500 MPa 150 527 Tensile Strain, break, 50 mm/min 2500 MPa 150 527 Tensile Modulus, 1 mm/min 2500 MPa 150 527 Tensile Modulus, 1 mm/min 2500 MPa 150 72 Flexural Modulus, 2 mm/min 2500 MPa 150 72 Flexural Modulus, 2 mm/min 2500 MPa 150 78 Flexural Modulus, 2 mm/min 2500 MPa 250 78 Flexural Modulus, 2 mm/min 2500 MPa 250 78 Instrument Carla Modulus, 2 mm/min 250 72 250 72 250 72	Tensile Strain, brk, Type I, 50 mm/min	102	%	ASTM D638
Beward Modulus, 1.3 mm/min, 50 mm span 2500 MPa ASM D790 Tensile Stress, yield, 50 mm/min 74 MPa ISS 227 Tensile Stress, Dreak, 50 mm/min 76 MPa ISS 227 Tensile Strain, yield, 50 mm/min 68 8 ISS 227 Tensile Strain, break, 50 mm/min 109 8 ISS 227 Tensile Modulus, 1 mm/min 2500 MPa ISS 27 Ewaral Stress, yield, 2 mm/min 107 MPa ISS 1078 Ewarral Modulus, 2 mm/min 107 MPa ISS 1078 Ewarral Modulus, 2 mm/min 107 MPa ISS 1078 Ewarral Modulus, 2 mm/min 107 AST MD 256 ISS 1078 Ewarral Modulus, 2 mm/min 107 AST MD 256 ISS 1078 Ewarral Modulus, 2 mm/min 107 AST MD 256 ISS 1078 Ewarral Modulus, 2 mm/min 107 AST MD 256 ISS 1078 Ewarral Modulus, 2 mm/min 107 AST MD 256 ISS 1078 Ewarral Modulus, 2 mm/min 108 Manual Manual MD 256 ISS 1078 <t< td=""><td>Tensile Modulus, 5 mm/min</td><td>2610</td><td>MPa</td><td>ASTM D638</td></t<>	Tensile Modulus, 5 mm/min	2610	MPa	ASTM D638
Tensile Stress, yield, 50 mm/min 74 MPa SO 527 Tensile Stress, break, 50 mm/min 76 MPa ISO 527 Tensile Strain, yield, 50 mm/min 6.8 % SO 527 Tensile Strain, break, 50 mm/min 199 % SO 527 Tensile Modulus, 1 mm/min 2500 MPa SO 178 Elexural Stress, yield, 2 mm/min 107 MPa SO 178 Hexural Modulus, 2 mm/min 2320 MPa SO 178 Elexural Modulus, 2 mm/min 194 Jm ASTM D256 Horror 1 Jm ASTM D256 Bod Impact, notched, 23°C 194 Jm ASTM D256 Instrumented Dart Impact Total Energy, 23°C 80 Jm ASTM D256 Izod Impact, notched, 30°C 112 Jm ASTM D256 Izod Impact, notched 90°10°4-23°C 80 Jm SO 180/JA Izod Impact, notched 90°10°4-23°C 90 Mp SO 180/JA Izod Impact, notched 90°10°4-23°C 90 Mp SO 180/JA Izod Impact, notched 90°10°4-23°C </td <td>Flexural Stress, yld, 1.3 mm/min, 50 mm span</td> <td>115</td> <td>MPa</td> <td>ASTM D790</td>	Flexural Stress, yld, 1.3 mm/min, 50 mm span	115	MPa	ASTM D790
Tensile Stress, break, 50 mm/min 76 MPa 105 527 Tensile Strain, yield, 50 mm/min 6.8 % 150 527 Tensile Strain, break, 50 mm/min 109 % 150 527 Tensile Modulus, 1 mm/min 2500 MPa 150 527 Flexural Modulus, 2 mm/min 2300 MPa 150 178 Instrumenta Darli Mighact, notched, 23°C 194 J/m ASTM D256 Iost Impact, notched, 30°C 112 J/m ASTM D256 Iost Impact, notched, 30°C 112 J/m ASTM D256 Iost Impact, notched, 30°C 16 J/m² ASTM D256 Iost Impact, notched, 30°C 10 J/m² ASTM D3763 Iod Impact, notched, 80°10°4 sp=62mm 24 J/m² Iost 300 I/n² Tensile Stress, yield, 2 mm/min 10 2 ASTM D3763 Tensile Stress, yield, 2 mm/min 12 4 ASTM D256 Iost Impact, notched, 20°C 10 ASTM D376 ASTM D376 Tensile Stress, yield, 2 mm/min 10 2 ASTM D376 <	Flexural Modulus, 1.3 mm/min, 50 mm span	2500	MPa	ASTM D790
Tensile Strain, yield, 50 mm/min 6.8 \$ 105 527 Tensile Strain, break, 50 mm/min 109 % 150 527 Tensile Modulus, 1 mm/min 2500 MPa 150 527 Flexural Stress, yield, 2 mm/min 107 MPa 150 178 Flexural Modulus, 2 mm/min 2320 MPa 150 178 Instrumented Modulus, 2 mm/min 2320 Jm ASTM 0256 Instrumented Modulus, 2 mm/min 194 Jm ASTM 0256 Instrumented Modulus, 2 mm/min 194 Jm ASTM 0256 Instrumented Modulus, 2 mm/min 194 Jm ASTM 0256 Instrumented Modulus, 2 mm/min 450 Jm ASTM 0256 Ized Impact, notched, 30°C 12 Jm ASTM 0256 Ized Impact, notched, 30°C 10 MJm² ASTM 03763 Ized John pact, notched, 80°10°4 spa 620m 10 MJm² 10 180/14 Rod Jingare, notched, 80°10°4 spa 620m 10 C ASTM 0376 Usat Softening Temp, Rate B/50 10 C<	Tensile Stress, yield, 50 mm/min	74	MPa	ISO 527
Tensile Strain, break, 50 mm/min 109 % ISO 527 Tensile Modulus, 1 mm/min 2500 MPa ISO 527 Flexural Stress, yield, 2 mm/min 107 MPa ISO 178 Flexural Modulus, 2 mm/min 2320 MPa ISO 178 IMPACT ⁽¹⁾ V V V Izod Impact, notched, 23°C 194 J/m ASTM D256 Izod Impact, notched, 30°C 192 J/m ASTM D3763 Izod Impact, notched 80°10°4 + 23°C 80 J/m ASTM D3763 Izod Impact, notched 80°10°4 - 30°C 10 Iso 180/m² ISO 180/1A Izod Impact, notched 80°10°4 - 30°C 10 Iso 180/m² ISO 180/1A Izod Impact, notched 80°10°4 - 30°C 10 I/m² ISO 180/1A Izod Impact, notched 80°10°4 - 30°C 10 I/m² ISO 180/1A Izod Impact, notched 80°10°4 - 30°C 10 Iso 180/1A Iso 180/1A Izod Impact, notched 80°10°4 - 30°C 10 Iso 180/1A Iso 180/1A Izod Impact, notched 80°10°4 - 30°C 10 Iso 180/1A Is	Tensile Stress, break, 50 mm/min	76	MPa	ISO 527
Tensile Modulus, 1 mm/min 2500 MPa 105 27 Flexural Stress, yield, 2 mm/min 107 MPa 107 18 IMPACT ⁽¹⁾ 2320 MPa 107 18 IMPACT ⁽¹⁾ V V Impact, notched, 30°C 194 J/m ASTM D256 Iost Impact, notched, 30°C 112 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 80 J/m ASTM D256 Izod Impact, notched 80°10°4 23°C 16 I/m ASTM D3763 Izod Impact, notched 80°10°4 23°C 2 6 I/m S0 180/1A Izod Impact, notched 80°10°4 23°C 3 6 I/m S0 180/1A Izod Impact, notched 80°10°4 23°C 4 1/m S0 180/1A Izod Impact, notched 80°10°4 23°C 8 1/m S0 180/1A Izod Impact, notched 80°10°4 23°C 8 1/m 8	Tensile Strain, yield, 50 mm/min	6.8	%	ISO 527
Flexural Stress, yield, 2 mm/min 107 MPa 107 Flexural Modulus, 2 mm/min 2320 MPa 107 IMPACT ⁽¹⁾ US 108 108 Izod Impact, notched, 23°C 194 J/m ASTM D256 Izod Impact, notched, 30°C 112 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 80 J/m² ASTM D3763 Izod Impact, notched 80°10°4-23°C 60 kl/m² ISO 180/1A Izod Impact, notched 80°10°4-23°C 62 kl/m² ISO 180/1A Izod Impact, notched 80°10°4-23°C 62 kl/m² ISO 180/1A Izod Impact, notched 80°10°4-23°C 62 kl/m² ISO 180/1A Izod Impact, notched 80°10°4-23°C 42 kl/m² ISO 180/1A Izod Impact, notched 80°10°4-23°C 42 8 M² Izod Impact, notched 80°10°4-23°C 8 8 107 8 Izod Impact, notched 80°10°4-23°C 8 8 107 8 108 108 108 108 108 108 10	Tensile Strain, break, 50 mm/min	109	%	ISO 527
Fleural Modulus, 2 mm/min 320	Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
IMPACT ⁽¹⁾ Izod Impact, notched, 23°C 194 1/m ASTM D256 Izod Impact, notched, -30°C 112 1/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 80 1 ASTM D3763 Izod Impact, notched 80°10°4 +23°C 16 kl/m² 50 180/1A Izod Impact, notched 80°10°4 +23°C 10 kl/m² 50 180/1A Izod Impact, notched 80°10°4 +23°C 10 kl/m² 50 180/1A Izod Impact, notched 80°10°4 +23°C 10 kl/m² 50 180/1A Izod Impact, notched 80°10°4 +23°C 10 kl/m² 50 180/1A Izod Impact, notched 80°10°4 +23°C 10 kl/m² 50 180/1A Izod Impact, notched 80°10°4 +23°C 10 80 180/1A 10 Izod Impact, notched 80°10°4 +23°C 10 80 180/1A 10 <td>Flexural Stress, yield, 2 mm/min</td> <td>107</td> <td>MPa</td> <td>ISO 178</td>	Flexural Stress, yield, 2 mm/min	107	MPa	ISO 178
Izod Impact, notched, 23°C 194 J/m ASTM D256 Izod Impact, notched, -30°C 112 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 80 J ASTM D3763 Izod Impact, notched 80°10°4 + 23°C 16 J/m² ISO 180/1A Izod Impact, notched 80°10°4 - 30°C 10 J/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°4 - 30°C 24 J/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°4 - 30°C 40 % ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 140 % ASTM D648 CTE, -40°C to 40°C, filow 57.E05 J°C ASTM D648 CTE, -40°C to 40°C, filow 57.E05 J°C ASTM E831 CTE, -40°C to 40°C, filow 57.E05 J°C ISO 11359-2 CTE, -40°C to 40°C, filow 57.E05 J°C ISO 11359-2 CTE, -40°C to 40°C, filow 57.E05 J°C ISO 10359-2 Bill Pressure Test, approximate maximum 125 S°C ISO 306 Vicat Softening Temp, Rate B/50 39 C°C	Flexural Modulus, 2 mm/min	2320	MPa	ISO 178
Izod Impact, notched, 30°C 112 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 80 J ASTM D3763 Izod Impact, notched 80°10°4 + 23°C 16 kJ/m² ISO 180/1A Izod Impact, notched 80°10°4 + 30°C 10 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°4 sp=62mm 24 kJ/m² ISO 179/1eA THERMAL (*) Vicat Softening Temp, Rate B/50 140 °C ASTM D648 HDT, 1.82 MPa, 3.2mm, unannealed 21 °C ASTM D648 CTE, -40°C to 40°C, filow 5.7E-05 1/°C ASTM E831 CTE, -40°C to 40°C, filow 6.E-05 1/°C ASTM E831 CTE, -40°C to 40°C, filow 6.E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, filow 5.7E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, filow 137 °C ISO 306 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 17 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=	IMPACT (1)			
Instrumented Dart Impact Total Energy, 23°C 80 I ASTM D3763 Izod Impact, notched 80°10°4 +23°C 16 I/m² ISO 180/1A Izod Impact, notched 80°10°4 -30°C 10 I/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°4 sp=62mm 24 I/m² I/m² ISO 179/1eA THERMAL (¹) V V ASTM D1525 V HDT, 1.82 MPa, 3.2mm, unannealed 121 ° C ASTM D648 CTE, 40°C to 40°C, flow 5.7E-05 1/° ASTM E831 CTE, 40°C to 40°C, xflow 6.E05 1/° ASTM E831 CTE, 40°C to 40°C, xflow 5.7E-05 1/° ISO 11359-2 CTE, 40°C to 40°C, xflow 6.E05 1/° ISO 11359-2 CTE, 40°C to 40°C, xflow 12 ° ISO 306 Ball Pressure Test, approximate maximum 125 ° ISO 306 Vicat Softening Temp, Rate B/50 137 ° ISO 306 Vicat Softening Temp, Rate B/120 139 ° ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm 117	Izod Impact, notched, 23°C	194	J/m	ASTM D256
Rod Impact, notiched 80*10*4 +23°C 16 kl/m² ISO 180/1A Lod Impact, notiched 80*10*4-30°C 10 kl/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm 24 kl/m² ISO 180/1A THERMAL (1) Vicat Softening Temp, Rate B/50 140 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 121 °C ASTM D648 CTE, 40°C to 40°C, flow 5.7E-05 1/°C ASTM E831 CTE, 40°C to 40°C, xflow 5.7E-05 1/°C ASTM E831 CTE, 40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 CTE, 40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 CTE, 40°C to 40°C, xflow 125 °C IEC 60695-10-2 Wicat Softening Temp, Rate B/50 137 °C ISO 306 Wicat Softening Temp, Rate B/120 17 °C ISO 306 PhySICAL (1) PhySICAL (1) PhySICAL (1) Specific G	Izod Impact, notched, -30°C	112	J/m	ASTM D256
Izod Impact, notched 80*10*4-30°C 10 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm 24 kJ/m² ISO 179/1eA THERMAL 11 Vicat Softening Temp, Rate B/50 140 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 121 °C ASTM E831 CTE, 40°C to 40°C, flow 5.7E-05 1/°C ASTM E831 CTE, 40°C to 40°C, xflow 5.7E-05 1/°C ASTM E831 CTE, 40°C to 40°C, xflow 5.7E-05 1/°C ASTM E831 CTE, 40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 CTE, 40°C to 40°C, xflow 125 °C ISO 306 Wicat Softening Temp, Rate B/50 137 °C ISO 306 Wicat Softening Temp, Rate B/120 137 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 117 °C ISO 306 PHYSICAL Specific Gravity 1,34 1.84 1.81 2.81 2.81	Instrumented Dart Impact Total Energy, 23°C	80	J	ASTM D3763
Charpy 23°C, V-notch Edgew 80°10°4 sp=62mm 24 kl/m² ISO 179/1eA THERMAL (¹¹) Vicat Softening Temp, Rate B/50 140 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 121 °C ASTM D648 CTE, -40°C to 40°C, flow 5.7E-05 1/°C ASTM E831 CTE, -40°C to 40°C, xflow 5.7E-05 1/°C ASTM E831 CTE, -40°C to 40°C, xflow 5.7E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 5.7E-05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Wicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm 117 °C ISO 306 PHYSICAL (¹) 5 134 °C ATM D792	Izod Impact, notched 80*10*4 +23°C	16	kJ/m²	ISO 180/1A
THERMAL (1) Vicat Softening Temp, Rate B/50 140 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 121 °C ASTM D648 CTE, -40°C to 40°C, flow 5.7E-05 1/°C ASTM E831 CTE, -40°C to 40°C, flow 6.E-05 1/°C ASTM E831 CTE, -40°C to 40°C, flow 5.7E-05 1/°C ASTM E831 CTE, -40°C to 40°C, flow 6.E-05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C ISC 0695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm 117 °C ISO 75/Af PHYSICAL (1) 124 134 °C ISO 75/Af	Izod Impact, notched 80*10*4 -30°C	10	kJ/m²	ISO 180/1A
Vicat Softening Temp, Rate B/50 140 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 121 °C ASTM D648 CTE, -40°C to 40°C, flow 5.76:05 1/°C ASTM E831 CTE, -40°C to 40°C, xflow 6.6:05 1/°C ASTM E831 CTE, -40°C to 40°C, xflow 5.76:05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 117 °C ISO 75/Af PHYSICAL (¹) STM D792	Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	24	kJ/m²	ISO 179/1eA
HDT, 1.82 MPa, 3.2mm, unannealed 121 °C ASTM D648 CTE, -40°C to 40°C, flow 5.7E-05 1/°C ASTM E831 CTE, -40°C to 40°C, xflow 6.E-05 1/°C ASTM E831 CTE, -40°C to 40°C, flow 5.7E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm 117 °C ISO 75/Af PHYSICAL ⁽¹⁾ Specific Gravity 1.34 - ASTM D792	THERMAL (1)			
CTE, -40°C to 40°C, flow 5.7E-05 1/°C ASTM E831 CTE, -40°C to 40°C, xflow 6.E-05 1/°C ASTM E831 CTE, -40°C to 40°C, flow 5.7E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 117 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm 117 °C ISO 75/Af PHYSICAL (1) PHYSICAL (2) ISO 75/Af ASTM D792	Vicat Softening Temp, Rate B/50	140	°C	ASTM D1525
CTE, -40°C to 40°C, xflow 6.E-05 1/°C ASTM E831 CTE, -40°C to 40°C, flow 5.7E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm 117 °C ISO 75/Af PHYSICAL ⁽¹⁾ Specific Gravity ASTM D792	HDT, 1.82 MPa, 3.2mm, unannealed	121	°C	ASTM D648
CTE, -40°C to 40°C, flow 5.7E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm 117 °C ISO 75/Af PHYSICAL ** ** ASTM D792	CTE, -40°C to 40°C, flow	5.7E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow 6.E-05 1/°C ISO 11359-2 Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 117 °C ISO 75/Af PHYSICAL ** ** ** ** Specific Gravity 1.34 ** * ** ASTM D792	CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ASTM E831
Ball Pressure Test, approximate maximum 125 °C IEC 60695-10-2 Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 117 °C ISO 75/Af PHYSICAL (1) ** ** ASTM D792	CTE, -40°C to 40°C, flow	5.7E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50 137 °C ISO 306 Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 117 °C ISO 75/Af PHYSICAL (1) Specific Gravity ASTM D792	CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120 139 °C ISO 306 HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 117 °C ISO 75/Af PHYSICAL (1) *** *** ASTM D792	Ball Pressure Test, approximate maximum	125	°C	IEC 60695-10-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 117 °C ISO 75/Af PHYSICAL (1) Specific Gravity 1.34 - ASTM D792	Vicat Softening Temp, Rate B/50	137	°C	ISO 306
PHYSICAL (1) Specific Gravity 1.34 - ASTM D792	Vicat Softening Temp, Rate B/120	139	°C	ISO 306
Specific Gravity 1.34 - ASTM D792	HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	117	°C	ISO 75/Af
Specific Gravity 1.34 - ASTM D792	PHYSICAL (1)			
Mold Shrinkage, flow, 3.2 mm (2)		1.34	-	ASTM D792
	Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.6 - 0.8	%	SABIC method



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Flow Rate, 300°C/1.2 kgf	5	g/10 min	ASTM D1238
Density	1.34	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.28	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.11	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	4	cm³/10 min	ISO 1133
Melt Volume Rate, MVR at 300°C/5.0 kg	16	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS			
OSU total heat release (2 minute test)	<55	kW-min/m²	FAR 25.853
OSU peak heat release rate (5 minute test)	<55	kW/m²	FAR 25.853
Vertical Burn a (60s) passes at	2.4	Seconds	FAR 25.853
Vertical Burn b (12s) passes at	0.5	Seconds	FAR 25.853
NBS Smoke Density, Flaming, Dmax	<25	-	ASTM E662
INJECTION MOLDING (3)			
Drying Temperature	105	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	12	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	280 – 305	°C	
Nozzle Temperature	275 – 300	°C	
Front - Zone 3 Temperature	280 – 305	°C	
Middle - Zone 2 Temperature	270 – 295	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	70 – 105	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 - 0.076	mm	

⁽¹⁾ The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

MORE INFORMATION

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

⁽²⁾ Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.,The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

⁽³⁾ Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.



DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.