

LEXANTM COPOLYMER HPX4

REGION ASIA

DESCRIPTION

Medium flow specialty polycarbonate - improved processability & autoclavability. For medical devices and pharmaceutical applications. Healthcare management of change, biocompatible (ISO10993 or USP Class VI). EtO and steam sterilizable.

TYPICAL PROPERTY VALUES

Revision 20241028

MECHANICA. (*) MFQ ASTM DG8 Tensile Stress, brk, Type I, 50 mm/min 64 MPQ ASTM DG8 Tensile Strain, Jrd, Type I, 50 mm/min 5.8 % ASTM DG8 Tensile Strain, Jrd, Type I, 50 mm/min 131.4 % ASTM DG8 Tensile Strain, Jrd, Type I, 50 mm/min 210.0 MPQ ASTM DG8 Tensile Modulus, 1.3 mm/min, 50 mm span 94 MPQ ASTM D790 Hexural Modulus, 1.3 mm/min, 50 mm span 92.10 MPQ ASTM D790 Hexural Modulus, 1.3 mm/min, 50 mm span 57 MPQ SO 527 Hexural Modulus, 1.3 mm/min 57 MPQ SO 527 Tensile Strass, yeld, 50 mm/min 57 MPQ SO 527 Tensile Strain, yeld, 50 mm/min 124.9 % SO 527 Tensile Strain, break, 50 mm/min 239.0 MPQ SO 527 Tensile Strain, break, 50 mm/min 99 MPQ SO 178 Reward Modulus, 2 mm/min 90 MPQ SO 178 Reward Modulus, 2 mm/min 90 MPQ SO 178 Re	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Stress, brk, Type I, 50 mm/min 64 MPB ASTM D638 Tensile Strain, Johr, Type I, 50 mm/min 5.8 % ASTM D638 Tensile Modulus, 50 mm/min 2210 MPB ASTM D638 Flexural Stress, Joh, 1.3 mm/min, 50 mm span 94 MPB ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 9210 MPB ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 9210 MPB ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 57 MPB ASTM D795 Tensile Stress, Jedd, 50 mm/min 57 MPB 50 527 Tensile Stress, Jedd, 50 mm/min 55 % 50 527 Tensile Stress, Jedd, 50 mm/min 250 MPB 50 527 Tensile Modulus, 1 mm/min 2950 MPB 50 527 Flexural Modulus, 2 mm/min 90 MPB 50 178 Flexural Modulus, 2 mm/min 90 Jm ASTM D576 Flexural Modulus, 2 mm/min 80 Jm ASTM D576 Flexural Modulus, 2 mm/min MPB 50 178	MECHANICAL (1)			
Tensile Strain, lyft, Type I, 50 mm/min 58 \$ ASTM D638 Tensile Strain, lyft, Type I, 50 mm/min 31.4 % ASTM D638 Tensile Strain, lyft, Type I, 50 mm/min 2210 MPa ASTM D638 Elexural Modulus, 5.0 mm/min, 50 mm span 210 MPa ASTM D790 Elexural Modulus, 1.3 mm/min, 50 mm span 2210 MPa ASTM D790 Hardness, Rockwell L 89 - ASTM D785 Tensile Stress, lyfeld, 50 mm/min 57 MPa 80.527 Tensile Stress, lyfeld, 50 mm/min 5.5 % 50.527 Tensile Strain, lyfeld, 50 mm/min 5.5 % 50.527 Tensile Strain, lyfeld, 50 mm/min 2390 MPa 50.527 Tensile Strain, lyfeld, 50 mm/min 124,9 % 50.527 Tensile Strain, lyfeld, 50 mm/min 129.0 MPa 50.527 Tensile Strain, lyfeld, 50 mm/min 5.5 % 50.527 Tensile Strain, lyfeld, 50 mm/min 124,9 % 50.527 Tensile Strain, lyfeld, 50 mm/min 30.527 30.527	Tensile Stress, yld, Type I, 50 mm/min	58	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min 131.4 % ASTM D638 Tensile Modulus, 50 mm/min 2210 MPa ASTM D638 Flexural Modulus, 13 mm/min, 50 mm span 94 MPa ASTM D790 Herdness, Rockwell L 89 - ASTM D795 Tensile Stress, yield, 50 mm/min 57 MPa ISO 527 Tensile Stress, break, 50 mm/min 55 48 50 527 Tensile Strain, break, 50 mm/min 25 50 527 50 527 Tensile Strain, break, 50 mm/min 25 48 50 527 Tensile Strain, break, 50 mm/min 25 50 527 50 527 Tensile Strain, break, 50 mm/min 20 MPa 50 527 Tensile Modulus, 1 mm/min 2350 MPa 50 527 Flexural Modulus, 2 mm/min 90 MPa 50 178 Flexural Modulus, 2 mm/min 91 MPa 50 178 Elevarial Modulus, 2 mm/min 91 MPa 50 178 Elevarial Modulus, 2 mm/min 91 30 178 50 178 Insurant Stress, yield,	Tensile Stress, brk, Type I, 50 mm/min	64	MPa	ASTM D638
Tensile Modulus, 50 mm/min 2210 MPa ASTM D638 Flexural Stress, yld, 1.3 mm/min, 50 mm span 94 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2210 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2210 MPa ASTM D785 Tensile Stress, yleid, 50 mm/min 57 MPa 50.527 Tensile Stress, break, 50 mm/min 5.5 % 50.527 Tensile Strain, yleid, 50 mm/min 2330 MPa 50.527 Tensile Strain, yleid, 50 mm/min 2330 MPa 50.527 Tensile Modulus, 1 mm/min 2330 MPa 50.527 Tensile Strain, yleid, 50 mm/min 2350 MPa 50.527 Tensile Modulus, 1 mm/min 2300 MPa 50.72 Tensile Strain, yleid, 50 mm/min 2300 MPa 50.72 Tensile Strain, yleid, 50 mm/min 2300 MPa 50.527 Tensile Strain, yleid, 50 mm/min 40.52 50.72 40.72 Tensile Strain, yleid, 50 mm/min 40.72 50.72 40.72 <td>Tensile Strain, yld, Type I, 50 mm/min</td> <td>5.8</td> <td>%</td> <td>ASTM D638</td>	Tensile Strain, yld, Type I, 50 mm/min	5.8	%	ASTM D638
Flexural Stress, yid, 1.3 mm/min, 50 mm span 94 MPa ASTM D790 Flexural Modulus, 1.3 mm/min, 50 mm span 2210 MPa ASTM D790 Hardness, Rockwell L 89 - ASTM D785 Tensile Stress, yield, 50 mm/min 61 APA ISO 527 Tensile Stress, break, 50 mm/min 55 % 80 ISO 527 Tensile Strain, break, 50 mm/min 2350 MPa ISO 527 Tensile Modulus, 1 mm/min 2350 MPa ISO 527 Flexural Modulus, 2 mm/min 2150 MPa ISO 527 Flexural Modulus, 2 mm/min 2150 MPa ISO 527 Flexural Modulus, 2 mm/min 2150 MPa ISO 178 Instrument David Impact, notched, 23°C 80 J/m ASTM D256	Tensile Strain, brk, Type I, 50 mm/min	131.4	%	ASTM D638
Elexural Modulus, 1.3 mm/min, 50 mm span 2210 MPa ASTM D790 Hardness, Rockwell L 89 - ASTM D785 Tensile Stress, pield, 50 mm/min 57 MPa ISO 527 Tensile Stress, pield, 50 mm/min 51 MPa ISO 527 Tensile Strain, yield, 50 mm/min 55 % ISO 527 Tensile Strain, break, 50 mm/min 24.9 % ISO 527 Tensile Modulus, 1 mm/min 2350 MPa ISO 527 Flexural Modulus, 2 mm/min 210 MPa ISO 178 Flexural Modulus, 2 mm/min 2150 MPa ISO 178 Flexural Modulus, 2 mm/min 210 MPa ISO 178 Flexural Modulus, 2 mm/min 210 MPa ISO 178 Flexural Modulus, 2 mm/min 210 MPa ISO 178 Elexural Modulus, 2 mm/min 210 MPa ASTM D356 Ilexural Modulus, 2 mm/min 210 MPa ASTM D366 Ilexural Modulus, 2 mm/min 210 MPa ASTM D256 Ilexural Modulus, 2 mm/min	Tensile Modulus, 50 mm/min	2210	MPa	ASTM D638
Hardness, Rockwell L 89 - ASTM D78S Tensile Stress, yield, 50 mm/min 57 MPa ISO 527 Tensile Stress, break, 50 mm/min 61 MPa ISO 527 Tensile Strain, yield, 50 mm/min 124.9 % ISO 527 Tensile Modulus, 1 mm/min 2350 MPa ISO 527 Flexural Stress, yield, 2 mm/min 90 MPa ISO 178 Flexural Modulus, 2 mm/min 2150 MPa SO 178 Flexural Modulus, 2 mm/min 90 MPa SO 178 Impact, notched, 23°C 890 J/m ASTM D256 Izod Impact, notched, 30°C 95 J/m ASTM D256 Izod Impact, notched 80°10°3 +23°C 82 J ASTM D2763 Izod Impact, notched 80°10°3 +23°C 85 J ASTM D3763 Izod Impact, notched 80°10°3 +23°C NB kJ/m² SO 180/10 Izod Impact, notched 80°10°3 +23°C 85 kJ/m² SO 180/10 Izod Impact, notched 80°10°3 +23°C 55 kJ/m² SO 180/10 Izod Impact,	Flexural Stress, yld, 1.3 mm/min, 50 mm span	94	MPa	ASTM D790
Tensile Stress, yield, 50 mm/min 57 MPa SO 527 Tensile Strain, yield, 50 mm/min 5.5 % SO 527 Tensile Strain, yield, 50 mm/min 5.5 % SO 527 Tensile Strain, yield, 50 mm/min 214.9 % SO 527 Tensile Modulus, 1 mm/min 2350 MPa SO 527 Flexural Stress, yield, 2 mm/min 90 MPa SO 178 Flexural Modulus, 2 mm/min 90 MPa SO 178 Impact, notched, 23°C 890 J/m ASTM D256 Ized Impact, notched, 30°C 95 J/m ASTM D256 Ized Impact, notched So*10°3 +23°C 82 J ASTM D256 Ized Impact, unnotched 80°10°3 +23°C 85 J ASTM D3763 Ized Impact, notched 80°10°3 +23°C 88 J/m² SO 180/10 Ized Impact, notched 80°10°3 +23°C 85 J ASTM D3763 Ized Impact, notched 80°10°3 +23°C 86 J/m² SO 180/10 Ized Impact, notched 80°10°3 +23°C 85 J/m² SO 180/10 Ize	Flexural Modulus, 1.3 mm/min, 50 mm span	2210	MPa	ASTM D790
Tensile Stress, break, 50 mm/min 61 MPa ISO 527 Tensile Strain, yield, 50 mm/min 5.5 % ISO 527 Tensile Strain, break, 50 mm/min 124.9 % ISO 527 Tensile Modulus, 1 mm/min 2350 MPa ISO 527 Flexural Stress, yield, 2 mm/min 90 MPa ISO 178 Flexural Modulus, 2 mm/min 90 MPa ISO 178 Isola Impact, modulus, 2 mm/min 80 J/m ASTM D256 Izod Impact, notched, 30°C 82 J/m ASTM D256 Izod Impact, motched 80°10°3 +23°C 82 J/m² ISO 180/10 Izod Impact, notched 80°10°3 +23°C 85 J/m² ISO 180/10 Izod Impact, notched 80°10°3 +23°C 55 J/m² ISO 180/10 Charpy 30°C, V-no	Hardness, Rockwell L	89	-	ASTM D785
Tensile Strain, yield, 50 mm/min 5.5 % ISO 527 Tensile Strain, break, 50 mm/min 124.9 % ISO 527 Tensile Modulus, 1 mm/min 2350 MPa ISO 527 Flexural Stress, yield, 2 mm/min 90 MPa ISO 178 IMPACT ⁽¹⁾ V V V IMPACT ⁽¹⁾ V ASTM D256 Izod Impact, notched, 3°C 890 J/m ASTM D256 Izod Impact, notched, 3°C 89 J/m ASTM D363 Instrumented Dart Impact Total Energy, 23°C 82 J ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C 85 J ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C NB J/m² ISO 180/10 Izod Impact, notched 80°10°3 +23°C 55 J/m² ISO 180/10 Izod Impact, notched 80°10°3 spe62mm 55 J/m² ISO 180/10 Izod Impact, notched 80°10°3 spe62mm 55 J/m² ISO 180/10 Izony 30°C, V-notch Edgew 80°10°3 spe62mm 55 J/m² ISO 179/1e Charpy 30°C, V-notch	Tensile Stress, yield, 50 mm/min	57	MPa	ISO 527
Tensile Strain, break, 50 mm/min 124.9 % ISO 527 Tensile Modulus, 1 mm/min 2350 MPa ISO 178 Flexural Stress, yield, 2 mm/min 90 MPa ISO 178 Impact, 10 Stress, yield, 2 mm/min 2150 MPa ISO 178 Impact, 10 Stress, yield, 2 mm/min 2150 MPa ISO 178 Impact, 10 Stress, yield, 2 mm/min 2150 MPa ISO 178 Impact, 10 Stress, yield, 2 mm/min 2150 MPa ISO 178 Impact, 10 Stress, yield, 2 mm/min 2150 MPa ISO 178 Impact, 10 Stress, 150 3 Mpa MPa ASTM D256 Izod Impact, 10 Stress, 150 890 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 82 J/m ASTM D3763 Ibstrumented Dart Impact, 10 Stress, 150°C 85 J/m² ASTM D3763 Ibstrumented Dart Impact, 10 Stress, 150°C NB Isl/m² ISO 180/11 Izod Impact, 10 Stress, 10	Tensile Stress, break, 50 mm/min	61	MPa	ISO 527
Tensile Modulus, 1 mm/min 2350 MPa ISO 527 Flexural Stress, yield, 2 mm/min 90 MPa ISO 178 IMPACT (**) USD 250 MPa ISO 178 IMPACT (**) USD 250 MPa ISO 178 IMPACT (**) USD 250 MPa ISO 180 Izod Impact, notched, 23°C 890 J/m ASTM D256 Izod Impact, notched, 30°C 890 J/m ASTM D3763 Instrumented Dart Impact Total Energy, 23°C 82 J ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C NB Id/m² ISO 180/10 Izod Impact, unnotched 80°10°3 +23°C NB Id/m² ISO 180/10 Izod Impact, unnotched 80°10°3 +23°C NB Id/m² ISO 180/10 Izod Impact, notched 80°10°3 +23°C 55 I/m² ISO 180/10 Izod Impact, notched 80°10°3 sp=62mm 55 I/m² ISO 197/1e Charpy 23°C, Vnotch Edgew 80°10°3 sp=62mm 55 I/m² ISO 179/1e Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm NB I/m² ISO 179/1e </td <td>Tensile Strain, yield, 50 mm/min</td> <td>5.5</td> <td>%</td> <td>ISO 527</td>	Tensile Strain, yield, 50 mm/min	5.5	%	ISO 527
Flexural Stress, yield, 2 mm/min 90 MPa ISO 178 Flexural Modulus, 2 mm/min 2150 MPa ISO 178 IMPACT (¹) IMPACT (¹) IMPACT (¬) ASTM D256 IMPACT (¬) IMPACT (¬) ASTM D256 IMPACT (¬) IMPACT (¬	Tensile Strain, break, 50 mm/min	124.9	%	ISO 527
Flexural Modulus, 2 mm/min 2150 MPa ISO 178 IMPACT (1) IMPACT (2) IMPACT (2) IMPACT (3) IMPACT (3) ASTM D256 Izod Impact, notched, 23°C 890 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 82 J/m ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C NB kl/m² ISO 180/1U Izod Impact, unnotched 80°10°3 +23°C NB kl/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C NB kl/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C NB kl/m² ISO 180/1U Izod Impact, notched 80°10°3 -23°C 55 kl/m² ISO 180/1A Izod Impact, notched 80°10°3 sp=62mm 55 kl/m² ISO 179/1eA Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² ISO 179/1eA Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mm NB kl/m² NB ISO 179/1eA THERMAL (1) Y ASTM D1525 ASTM D648	Tensile Modulus, 1 mm/min	2350	MPa	ISO 527
IMPACT (1) Izod Impact, notched, 23°C 890 J/m ASTM D256 Izod Impact, notched, 30°C 795 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 82 J ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C NB I/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C NB I/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C NB I/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C S5 I/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C 55 I/m² ISO 180/1A Izod Impact, notched 80°10°3 sp=62mm 55 I/m² ISO 179/1eA Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm NB I/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm NB I/m² ISO 179/1eA Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mm NB I/m² SO 179/1eA Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mm NB I/m² SO 179/1eU Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mm AI X X <t< td=""><td>Flexural Stress, yield, 2 mm/min</td><td>90</td><td>MPa</td><td>ISO 178</td></t<>	Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Izod Impact, notched, 23°C 890 J/m ASTM D256 Izod Impact, notched, 30°C 795 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 82 J ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C NB kJ/m² ISO 180/1U Izod Impact, unnotched 80°10°3 +30°C NB kJ/m² ISO 180/1U Izod Impact, notched 80°10°3 +30°C NB kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 +30°C NB kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 +23°C 65 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 55 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eA Charpy 30°C, Unnotch Edgew 80°10°3 sp=62mm NB R M M M M M M M M M M M M	Flexural Modulus, 2 mm/min	2150	MPa	ISO 178
Izad Impact, notched, -30°C 795 J/m ASTM D256 Instrumented Dart Impact Total Energy, 23°C 82 J ASTM D3763 Instrumented Dart Impact Total Energy, -30°C 85 J ASTM D3763 Izad Impact, unnotched 80°10°3 +23°C NB KJ/m² ISO 180/1U Izad Impact, notched 80°10°3 -30°C NB KJ/m² ISO 180/1U Izad Impact, notched 80°10°3 -30°C 65 KJ/m² ISO 180/1A Izad Impact, notched 80°10°3 -30°C 55 KJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 65 KJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² SIO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB KJ/m² SIO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm 141 °C ASTM D1525 </td <td>IMPACT (1)</td> <td></td> <td></td> <td></td>	IMPACT (1)			
Instrumented Dart Impact Total Energy, 23°C 82 J ASTM D3763 Instrumented Dart Impact Total Energy, -30°C 85 J ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C NB kJ/m² ISO 180/1U Izod Impact, unnotched 80°10°3 +23°C NB kJ/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C 65 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 55 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² SIO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² SIO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 141 °C AS	Izod Impact, notched, 23°C	890	J/m	ASTM D256
Instrumented Dart Impact Total Energy, -30°C 85 J ASTM D3763 Izod Impact, unnotched 80°10°3 +23°C NB kJ/m² ISO 180/1U Izod Impact, unnotched 80°10°3 -30°C NB kJ/m² ISO 180/1U Izod Impact, notched 80°10°3 +23°C 65 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 55 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy 30°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 141 °C ASTM D648 HDT, 1.82 MPa, 3.2mm, unannealed 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831 </td <td>Izod Impact, notched, -30°C</td> <td>795</td> <td>J/m</td> <td>ASTM D256</td>	Izod Impact, notched, -30°C	795	J/m	ASTM D256
Izod Impact, unnotched 80°10°3 +23°C NB kJ/m² ISO 180/1U Izod Impact, unnotched 80°10°3 -30°C NB kJ/m² ISO 180/1U Izod Impact, notched 80°10°3 -23°C 65 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 55 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm 55 kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL ⁽¹⁾ Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM E831 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831	Instrumented Dart Impact Total Energy, 23°C	82	J	ASTM D3763
Izod Impact, unnotched 80°10°3 -30°C NB kJ/m² ISO 180/1U Izod Impact, notched 80°10°3 -23°C 65 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 55 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL ⁽¹⁾ Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM E831 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831	Instrumented Dart Impact Total Energy, -30°C	85	J	ASTM D3763
Izod Impact, notched 80°10°3 +23°C 65 kJ/m² ISO 180/1A Izod Impact, notched 80°10°3 -30°C 55 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹¹) Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 -30°C 55 kJ/m² ISO 180/1A Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm 55 kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹¹) Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Izod Impact, unnotched 80*10*3 -30°C	NB	kJ/m²	ISO 180/1U
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm 65 kJ/m² ISO 179/1eA Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm 55 kJ/m² ISO 179/1eA Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹¹) Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Izod Impact, notched 80*10*3 +23°C	65	kJ/m²	ISO 180/1A
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm 55 kJ/m² ISO 179/1eA Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹) Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Izod Impact, notched 80*10*3 -30°C	55	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU Charpy -30°C, Unnotch Edgew 80°10°3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹) Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	65	kJ/m²	ISO 179/1eA
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm NB kJ/m² ISO 179/1eU THERMAL (¹¹) Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	55	kJ/m²	ISO 179/1eA
THERMAL (1) Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
Vicat Softening Temp, Rate A/50 141 °C ASTM D1525 HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
HDT, 1.82 MPa, 3.2mm, unannealed 124 °C ASTM D648 CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	THERMAL (1)			
CTE, -40°C to 95°C, flow 7.15E-05 1/°C ASTM E831 CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	Vicat Softening Temp, Rate A/50	141	°C	ASTM D1525
CTE, -40°C to 95°C, xflow 7.93E-05 1/°C ASTM E831	HDT, 1.82 MPa, 3.2mm, unannealed	124	°C	ASTM D648
•	CTE, -40°C to 95°C, flow	7.15E-05	1/°C	ASTM E831
CTE, 23°C to 80°C, flow 7.15E-05 1/°C ISO 11359-2	CTE, -40°C to 95°C, xflow	7.93E-05	1/°C	ASTM E831
	CTE, 23°C to 80°C, flow	7.15E-05	1/°C	ISO 11359-2



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, 23°C to 80°C, xflow	7.93E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	pass	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	141	°C	ISO 306
Vicat Softening Temp, Rate B/120	142	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	118	°C	ISO 75/Af
Relative Temp Index, Elec (2)	130	°C	UL 746B
Relative Temp Index, Mech w/impact (2)	120	°C	UL 746B
Relative Temp Index, Mech w/o impact (2)	130	°C	UL 746B
PHYSICAL (1)			
Specific Gravity	1.19	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm (3)	0.4 - 0.8	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm ⁽³⁾	0.4 - 0.8	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	10	g/10 min	ASTM D1238
Density	1.19	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.12	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.09	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	9	cm³/10 min	ISO 1133
OPTICAL (1)			
Light Transmission, 2.54 mm	82	%	ASTM D1003
Haze, 2.54 mm	3	%	ASTM D1003
ELECTRICAL (1)			
Volume Resistivity	>1.E+15	Ω.cm	ASTM D257
Surface Resistivity	>1.E+15	Ω	ASTM D257
FLAME CHARACTERISTICS (2)			
UL Yellow Card Link	E207780-100566198		
UL Recognized, 94V-2 Flame Class Rating	≥2.5	mm	UL 94
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
Glow Wire Ignitability Temperature, 3.0 mm	825	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 2.5 mm	825	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.5 mm	825	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 0.8 mm	825	°C	IEC 60695-2-13
Glow Wire Flammability Index, 3.0 mm	960	°C	IEC 60695-2-12
Glow Wire Flammability Index, 2.5 mm	825	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.5 mm	825	°C	IEC 60695-2-12
Glow Wire Flammability Index, 0.8 mm	825	°C	IEC 60695-2-12
INJECTION MOLDING (4)			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
, 3		Llee	
Drying Time (Cumulative)	48	Hrs	
	48 0.02	%	
Drying Time (Cumulative)			
Drying Time (Cumulative) Maximum Moisture Content	0.02	%	
Drying Time (Cumulative) Maximum Moisture Content Melt Temperature	0.02 295 – 315	% °C	
Drying Time (Cumulative) Maximum Moisture Content Melt Temperature Nozzle Temperature	0.02 295 – 315 290 – 310	% °C °C	



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Temperature	70 – 95	°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.
- (2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (3) 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.
- (4) 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.

MORE INFORMATION

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

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.