

# LEXANTM COPOLYMER SLX1432

## REGION EUROPE

## **DESCRIPTION**

Medium viscosity PC copolymer with enhanced UV stabilization and added release agent. Available in opaque colors. Typical minimum color tolerance limit is DE CMC < 1.0

## **TYPICAL PROPERTY VALUES**

Revision 20230607

RECHANICAL     TEST METHODS       MECHANICAL     FEST METHODS       MECHANICAL     FEST METHODS       Tensile Stress, yid, Type I, 50 mm/min     65     Men     ASTM D638       Tensile Stress, yid, Type I, 50 mm/min     12     Men     ASTM D638       Tensile Strain, Jul, Type I, 50 mm/min     126     %     ASTM D638       Tensile Strain, Drk, Type I, 50 mm/min     126     %     ASTM D638       Flexural Stress, yiel, 1.3 mm/min, 50 mm span     105     Min     ASTM D790       Flexural Modulus, 1.3 mm/min, 50 mm span     2490     MPa     ASTM D790       Tensile Strain, Dreak, 50 mm/min     71     Min     MS D527       Tensile Strain, Dreak, 50 mm/min     123     %     MS D527       Tensile Strain, Dreak, 50 mm/min     123     %     MS D527       Tensile Strain, Dreak, 50 mm/min     123     %     MS D527       Tensile Strain, Dreak, 50 mm/min     123     %     MS D527       Tensile Strain, Dreak, 50 mm/min     123     MPa     MS D527       Tensile Strain, Dreak, 50 mm/min     123     MPa     MS D527				
Tensile Stress, lyft, Type I, 50 mm/min     65     MPG     ASIM D638       Tensile Stress, lyft, Type I, 50 mm/min     72     M7a     ASIM D638       Tensile Strain, lyft, Type I, 50 mm/min     126     %     ASIM D638       Tensile Strain, lyft, Type I, 50 mm/min     126     %     ASIM D638       Tensile Strain, lyft, Type I, 50 mm/min     2520     MPa     ASIM D790       Flexural Modulus, 13 mm/min, 50 mm span     105     MPa     ASIM D790       Tensile Stress, yield, 50 mm/min     6     MPa     ASIM D790       Tensile Strain, yield, 50 mm/min     10     MPa     ASIM D790       Tensile Strain, break, 50 mm/min     280     MPa     80 527       Tensile Strain, break, 50 mm/min     290     MPa     80 527       Tensile Strain, break, 50 mm/min     290     MPa     80 527       Tensile Strain, break, 50 mm/min     290     MPa     80 527       Tensile Strain, break, 50 mm/min     290     MPa     80 527       Tensile Strain, break, 50 mm/min     290     MPa     80 10 78       Tensile Strain, break, 50 mm/min     80     MPa	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Stress, brk, Type I, 50 mm/min     72     MPa     ASTM D638       Tensile Strain, Jvk, Type I, 50 mm/min     61     %     ASTM D638       Tensile Strain, Jvk, Type I, 50 mm/min     252     MPa     ASTM D638       Tensile Modulus, 5 mm/min     9520     MPa     ASTM D638       Flexural Stress, yidd, 1.3 mm/min, 50 mm span     105     MPa     ASTM D790       Flexural Modulus, 1.3 mm/min, 50 mm span     2490     MPa     ASTM D790       Tensile Stress, yield, 50 mm/min     7     MPa     80527       Tensile Stress, break, 50 mm/min     5.8     \$     80527       Tensile Stress, break, 50 mm/min     23     \$     80527       Tensile Stress, yield, 50 mm/min     23     \$     80527       Tensile Strain, break, 50 mm/min     80     \$     80527       Tensile Strain, Julia Mm/min     99     MPa     80527       Flexural Stress, yield, 20 mm/min     99     MPa     805178       Flexural Modulus, 2 mm/min     80     Jm     85718       Flexural Stress, yield, 2 mm/min     80     Jm     85718 <tr< td=""><td>MECHANICAL (1)</td><td></td><td></td><td></td></tr<>	MECHANICAL (1)			
Tensile Strain, Jrd, Type I, 50 mm/min     6.1     %     ASTM D638       Tensile Strain, Jrk, Type I, 50 mm/min     126     %     ASTM D638       Tensile Modulus, 5 mm/min     2520     MPa     ASTM D638       Elexural Modulus, 1.3 mm/min, 50 mm span     105     MPa     ASTM D790       Flexural Modulus, 1.3 mm/min, 50 mm span     2490     MPa     SO 527       Tensile Stress, break, 50 mm/min     5     MPa     SO 527       Tensile Stress, break, 50 mm/min     1     8     8     SO 527       Tensile Strain, break, 50 mm/min     23     8     SO 527       Tensile Strain, break, 50 mm/min     230     MPa     SO 527       Tensile Modulus, 1 mm/min     2590     MPa     SO 527       Flexural Modulus, 2 mm/min     290     MPa     SO 527       Tensile Strain, break, 50 mm/min     2590     MPa     SO 527       Tensile Strain, break, 50 mm/min     2590     MPa     SO 527       Tensile Strain, break, 50 mm/min     2590     MPa     SO 527       Tensile Strain, break, 50 mm/min     2590     MPa     SO 527 </td <td>Tensile Stress, yld, Type I, 50 mm/min</td> <td>65</td> <td>MPa</td> <td>ASTM D638</td>	Tensile Stress, yld, Type I, 50 mm/min	65	MPa	ASTM D638
Tensile Strain, brk. Type I, 50 mm/min     126     %     ASTM D638       Tensile Modulus, 5 mm/min     2520     MPa     ASTM D790       Flexural Stress, yld, 1.3 mm/min, 50 mm span     105     MPa     ASTM D790       Tensile Stress, yled, 50 mm/min, 50 mm span     65     MPa     ASTM D790       Tensile Stress, yled, 50 mm/min     71     MPa     50 527       Tensile Stress, break, 50 mm/min     8.8     %     50 527       Tensile Stress, break, 50 mm/min     5.8     %     50 527       Tensile Stress, break, 50 mm/min     250     MPa     50 527       Tensile Modulus, 1 mm/min     250     MPa     50 527       Tensile Modulus, 1 mm/min     99     MPa     50 78       Recural Modulus, 2 mm/min     99     MPa     50 78       Elexural Modulus, 2 mm/min     90     MPa     50 78       Elexural Modulus, 2 mm/min     80     MPa     50 78       Elexural Modulus, 2 mm/min     90     MPa     50 78       Elexural Modulus, 2 mm/min     80     30 78     50 78       Elexural Modulus, 2 mm/min	Tensile Stress, brk, Type I, 50 mm/min	72	MPa	ASTM D638
Tensile Modulus, 5 mm/min     5250     MPa     ASTM D638       Flexural Stress, yld, 1.3 mm/min, 50 mm span     105     MPa     ASTM D790       Flexural Modulus, 1.3 mm/min, 50 mm span     2490     MPa     ASTM D790       Tensile Stress, yeld, 50 mm/min     71     MPa     S0 527       Tensile Stress, break, 50 mm/min     71     MPa     S0 527       Tensile Stresin, break, 50 mm/min     123     %     S0 527       Tensile Stresin, break, 50 mm/min     123     %     S0 527       Tensile Stresin, break, 50 mm/min     129     MPa     S0 527       Tensile Modulus, 1 mm/min     99     MPa     S0 178       Flexural Stress, yield, 2 mm/min     99     MPa     S0 178       Flexural Modulus, 2 mm/min     99     MPa     S0 178       Flexural Modulus, 2 mm/min     99     MPa     S0 178       Interval Modulus, 2 mm/min     99     MPa     S0 178       Interval Modulus, 2 mm/min     99     MPa     S0 178       Interval Modulus, 2 mm/min     40     S0 178     MPa       Interval Modulus, 2 mm	Tensile Strain, yld, Type I, 50 mm/min	6.1	%	ASTM D638
Flexural Stress, yd. 1.3 mm/min, 50 mm span     150     MPa     ASTM D790       Flexural Modulus, 1.3 mm/min, 50 mm span     2490     MPa     ASTM D790       Tensile Stress, yleid, 50 mm/min     65     MPa     150 527       Tensile Stress, break, 50 mm/min     5.8     MPa     150 527       Tensile Strain, yleid, 50 mm/min     5.8     30 527     150 527       Tensile Strain, break, 50 mm/min     290     MPa     150 527       Tensile Strain, break, 50 mm/min     290     MPa     150 527       Tensile Strain, break, 50 mm/min     290     MPa     150 527       Tensile Modulus, 1 mm/min     99     MPa     150 527       Flexural Modulus, 2 mm/min     99     MPa     150 72       Flexural Stress, yleid, 2 mm/min     99     MPa     150 72       Flexural Modulus, 2 mm/min     99     MPa     150 72       Flexural Stress, yleid, 2 mm/min     90     17     20 72       Elevar Modulus, 2 mm/min     90     17     20 72       Broad Stress, yleid, 2 mm/min     90     17     20 72       Broad	Tensile Strain, brk, Type I, 50 mm/min	126	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span     2490     MPa     ASTM D790       Tensile Stress, pield, 50 mm/min     65     MPa     150.527       Tensile Stress, break, 50 mm/min     71     MPa     150.527       Tensile Strain, break, 50 mm/min     123     %     150.527       Tensile Strain, break, 50 mm/min     2590     MPa     150.527       Flexural Modulus, 1 mm/min     99     MPa     150.178       Flexural Modulus, 2 mm/min     99     MPa     150.178       Flexural Modulus, 2 mm/min     99     MPa     150.178       Tool Impact, notched, 23°C     860     JJm     ASTM D256       Izod Impact, notched, 30°C     123     JJm     ASTM D256       Izod Impact, notched, 80°10°3 +23°C     80     JJm     ASTM D363       Izod Impact, notched 80°10°3 +23°C     10     JJm     ASTM D3763       Charpy 23°C, Vnotch Edgew 80°10°3 spe Earm     15     Jm²     150.180/14       Charpy 23°C, Vnotch Edgew 80°10°3 spe Earm     15     Jm²     150.191/14       Charpy 23°C, Vnotch Edgew 80°10°3 spe Earm     15     2     ASTM D45	Tensile Modulus, 5 mm/min	2520	MPa	ASTM D638
Tensile Stress, yield, 50 mm/min     65     MPa     SO 527       Tensile Strain, yield, 50 mm/min     71     MPa     ISO 527       Tensile Strain, yield, 50 mm/min     5.8     %     SO 527       Tensile Strain, yield, 50 mm/min     233     %     SO 527       Tensile Modulus, 1 mm/min     2590     MPa     ISO 527       Flexural Stress, yield, 2 mm/min     99     MPa     ISO 178       Flexural Modulus, 2 mm/min     99     MPa     SO 178       Impact, notched, 23°C     860     J/m     ASTM D256       Izod Impact, notched, 23°C     23     J/m     ASTM D256       Izod Impact, notched, 23°C     1     ASTM D256     ASTM D256       Izod Impact, notched, 23°C     1     ASTM D256     ASTM D256       Izod Impact, notched, 23°C     1     ASTM D256     ASTM D256       Izod Impact, notched, 80°10°3 +23°C     1     MJm²     SO 180/10       Izod Impact, notched, 80°10°3 +23°C     1     MJm²     SO 180/10       Izod Impact, notched, 80°10°3 +23°C     1     MIn     SO 180/10       Izod Impa	Flexural Stress, yld, 1.3 mm/min, 50 mm span	105	MPa	ASTM D790
Tensile Stress, break, 50 mm/min     71     MPa     SO 527       Tensile Strain, yield, 50 mm/min     5.8     %     SO 527       Tensile Strain, break, 50 mm/min     123     %     SO 527       Tensile Modulus, 1 mm/min     2590     MPa     SO 527       Flexural Modulus, 2 mm/min     99     MPa     SO 178       Isolatory Televarial Modulus, 2 mm/min     860     Jm     ASTM D256       Izod Impact, notched, 23°C     860     Jm     ASTM D256       Izod Impact, notched, 30°C     19     ASTM D256       Izod Impact, unotched 80°10°3 +23°C     76     Jm     ASTM D3763       Izod Impact, notched 80°10°3 +23°C     88     Jm²     SO 180/14       Izod Impact, notched 80°10°3 +23°C     76     Jm²     SO 180/14       Izod Impact, notched 80°10°3 +23°C     88     Jm²     SO 180/14       Izod Impact, notched 80°10°3 +23°C     89     Jm²     SO 180/14       Charpy 23°C, V-notch Edgew 80°10°3 spe 62mm     65     Jm²     SO 180/14       Charpy 23°C, V-notch Edgew 80°10°3 spe 62mm     15     Jm²     SO 179/14	Flexural Modulus, 1.3 mm/min, 50 mm span	2490	MPa	ASTM D790
Tensile Strain, yield, 50 mm/min     5.8     %     50 527       Tensile Strain, break, 50 mm/min     123     %     50 527       Tensile Modulus, 1 mm/min     2590     MPa     150 178       Flexural Stress, yield, 2 mm/min     99     MPa     150 178       Elevaral Modulus, 2 mm/min     399     MPa     150 178       ImpACT***     V     MPa     50 178       ImpACT***     390     MPa     150 178       ImpACT***     V     ASTM D256       Ized Impact, notched, 3°C     860     J/m     ASTM D256       Ized Impact, notched, 3°C     680     J/m     ASTM D256       Ized Impact, notched 80°10°3 +23°C     76     J/m     ASTM D256       Ized Impact, notched 80°10°3 +23°C     98     J/m     150 180/14       Ized Jung Limpact, notched 80°10°3 +23°C     16     J/m     150 180/14       Ized Jung Limpact, notched 80°10°3 +23°C     15     J/m     150 180/14       Ized Jung Limpact, notched 80°10°3 +23°C     15     J/m     150 179/14       Ized Jung Limpact, notched 80°10°3 +23°C     150 180/1	Tensile Stress, yield, 50 mm/min	65	MPa	ISO 527
Tensile Strain, break, 50 mm/min     123     %     150 527       Tensile Modulus, 1 mm/min     2590     MPa     150 527       Flexural Stress, yield, 2 mm/min     99     MPa     150 178       Iterural Modulus, 2 mm/min     2390     MPa     150 178       IMPACT <sup>11</sup> V     V     V       Impact, notched, 23°C     860     J/m     ASTM D256       Izod Impact, notched, 30°C     1/m     ASTM D256       Izod Impact, unnotched 80°10°3 +23°C     66     J/m     ASTM D256       Izod Impact, unnotched 80°10°3 +23°C     65     J/m     MS D180/14       Izod Impact, notched 80°10°3 +23°C     65     J/m     MS D180/14       Izod Impact, notched 80°10°3 +23°C     10     J/m     MS D180/14       Izod Impact, notched 80°10°3 +23°C     15     J/m     MS D180/14       Izod Impact, notched 80°10°3 +23°C     15     J/m     MS D180/14       Charpy 23°C, V-notch Edgew 80°10°3 spe 62mm     15     J/m     MS D191/14       Charpy 23°C, V-notch Edgew 80°10°3 spe 62mm     13     MS M2     MS M2     MS M2     MS M2 <td>Tensile Stress, break, 50 mm/min</td> <td>71</td> <td>MPa</td> <td>ISO 527</td>	Tensile Stress, break, 50 mm/min	71	MPa	ISO 527
Tensile Modulus, 1 mm/min     2590     MPa     SO 527       Flexural Stress, yield, 2 mm/min     99     MPa     SO 178       Elexural Modulus, 2 mm/min     2390     MPa     150 178       IMPACT <sup>(1)</sup> Use of Impact, notched, 23°C     860     J/m     ASTM D256       Lod Impact, notched, 30°C     123     J/m     ASTM D256       Instrumented Dart Impact Total Energy, 23°C     76     J/m²     ASTM D3763       Izod Impact, notched 80°10°3 +23°C     88     J/m²     ISO 180/114       Izod Impact, notched 80°10°3 +23°C     65     J/m²     ISO 180/14       Izod Impact, notched 80°10°3 *23°C     16     J/m²     ISO 180/14       Izod Impact, notched 80°10°3 *23°C     65     J/m²     ISO 180/14       Charpy 23°C, V-notch Edgew 80°10°3 *sp=62mm     15     J/m²     ISO 197/16       Charpy 23°C, V-notch Edgew 80°10°3 *sp=62mm     18     J/m²     ISO 179/16       Charpy 23°C, V-notch Edgew 80°10°3 *sp=62mm     13     C     ASTM D618       THEMML**     1     2     ASTM D618       Liputal Markatilia     1     2	Tensile Strain, yield, 50 mm/min	5.8	%	ISO 527
Flexural Stress, yield, 2 mm/min     99     MPa     50 178       Flexural Modulus, 2 mm/min     2390     MPa     50 178       IMPACT <sup>(1)</sup> US     1 mg     50 178       Izod Impact, notched, 23°C     860     Jm     ASTM D256       Izod Impact, notched, 30°C     123     Jm     ASTM D3763       Izod Impact, notched 80°10°3 + 23°C     76     Jm     ASTM D3763       Izod Impact, notched 80°10°3 + 23°C     65     Jm     80 180/14       Izod Impact, notched 80°10°3 + 23°C     10     Jm²     80 180/14       Izod Impact, notched 80°10°3 + 23°C     10     Jm²     80 180/14       Izod Impact, notched 80°10°3 + 23°C     10     Jm²     80 180/14       Izod Impact, notched 80°10°3 + 23°C     10     Jm²     80 180/14       Izod Impact, notched 80°10°3 + 23°C     10	Tensile Strain, break, 50 mm/min	123	%	ISO 527
Flexural Modulus, 2 mm/min     3990     MPa     ISO 178       IMPACT (¹)     IMPACT (¹)     IMPACT (¬)     IMPACT (¬)     IMPACT (¬)     ASTM D256       Izod Impact, notched, 23°C     860     J/m     ASTM D256       Isotal Impact, notched, 30°C     123     J/m     ASTM D3763       Izod Impact, unnotched 80°10°3 +23°C     NB     kl/m²     ISO 180/10       Izod Impact, notched 80°10°3 +23°C     65     kl/m²     ISO 180/10       Izod Impact, notched 80°10°3 +23°C     10     kl/m²     ISO 180/10       Izod Impact, notched 80°10°3 +23°C     10     kl/m²     ISO 180/10       Izod Impact, notched 80°10°3 +23°C     10     kl/m²     ISO 180/10       Izod Impact, notched 80°10°3 +23°C     10     kl/m²     ISO 180/10       Charpy 23°C, V-notch Edgew 80°10°3 spe 62mm     5     B     kl/m²     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 spe 62mm     18     8     6     C     ASTM D352       HDF, 0.45 MPa, 3.2 mm, unannealed     13     8     C     ASTM D48       HDF, 0.45 MPa, 3.2 mm, unannealed     120     C <td>Tensile Modulus, 1 mm/min</td> <td>2590</td> <td>MPa</td> <td>ISO 527</td>	Tensile Modulus, 1 mm/min	2590	MPa	ISO 527
IMPACT <sup>(1)</sup> IX MODE (AST (CAST)	Flexural Stress, yield, 2 mm/min	99	MPa	ISO 178
Izod Impact, notched, 23°C     860     J/m     ASTM D256       Izod Impact, notched, -30°C     123     J/m     ASTM D256       Instrumented Dart Impact Total Energy, 23°C     76     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     65     J/m²     ISO 180/1A       Izod Impact, notched 80°10°3 sp=62mm     10     J/m²     ISO 180/1A       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     55     J/m²     ISO 179/1eA       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     15     J/m²     ISO 179/1eA       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     15     J/m²     ISO 179/1eA       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     15     J/m²     ISO 179/1eA       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     137     C     ASTM D1525       THERMAL <sup>(1)</sup> V     C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       HDT, 1.82 MPa, 3.2 mm, unannealed     2.20     1/m²     ASTM E831       CTE, 40°C to 40°C, filow     6	Flexural Modulus, 2 mm/min	2390	MPa	ISO 178
izod Impact, notched, 30°C     123     J/m     ASTM D256       instrumented Dart Impact Total Energy, 23°C     76     J/m²     ASTM D3763       izod Impact, unnotched 80°10°3 +23°C     NB     kl/m²     ISO 180/14       izod Impact, notched 80°10°3 +23°C     65     kl/m²     ISO 180/1A       izod Impact, notched 80°10°3 -30°C     10     kl/m²     ISO 180/1A       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     65     kl/m²     ISO 179/1eA       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     15     kl/m²     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     15     kl/m²     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     18     C°     ASTM D152       THERMAL ("     V     V     V     ISO 179/1eA       THERMAL ("     C°     ASTM D1525     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °     C     ASTM D648       HDT, 1.82 MPa, 3.2 mm, unannealed     2.2605     1/°C     ASTM E831       CTE, 40°C to 40°C, flow     6.2605     1/°C     ASTM E831       CTE, 40°C to 40°C, flow </td <td>IMPACT (1)</td> <td></td> <td></td> <td></td>	IMPACT (1)			
Instrumented Dart Impact Total Energy, 23°C     76     J     ASTM D3763       izod Impact, unnotched 80°10°3 +23°C     NB     kJ/m²     SO 180/1U       izod Impact, notched 80°10°3 +23°C     65     kJ/m²     SO 180/1A       izod Impact, notched 80°10°3 +23°C     10     kJ/m²     SO 180/1A       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     65     kJ/m²     SO 179/1eA       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     15     kJ/m²     SO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     kJ/m²     SO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     kJ/m²     SO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     NB     VJ/m²     SO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     NB     VJ/m²     SO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     137     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     120     °C     ASTM D648       CTE, 40°C to 40°C, flow     6.2E-05     1/°C     <	Izod Impact, notched, 23°C	860	J/m	ASTM D256
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 +23°C     10     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     15     kJ/m²     ISO 179/1eA       Charpy 23°C, Unnotch 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 23°C, Unnotch 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 23°C, Unnotch 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 23°C, Unnotch Edgew 80°10°3 sp=62mm     137     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       Che, 40°Cto 40°C, flow     6.2E-05     1/°C     ASTM E831	Izod Impact, notched, -30°C	123	J/m	ASTM D256
Izod Impact, notched 80°10°3 +23°C     65     kl/m²     ISO 180/1A       Izod Impact, notched 80°10°3 +23°C     10     kl/m²     ISO 180/1A       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     65     kl/m²     ISO 179/1eA       Charpy -30°C, V-notch Edgew 80°10°3 sp=62mm     15     kl/m²     ISO 179/1eA       Charpy 23°C, Unnotch 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 23°C, Unnotch 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 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     kl/m²     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     RD     RD     RD     RD     RD     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     133     °C     ASTM D01525     ASTM	Instrumented Dart Impact Total Energy, 23°C	76	J	ASTM D3763
Izod Impact, notched 80°10°3 -30°C     10     IXI/m²     ISO 180/1A       Charpy 23°C, V-notch Edgew 80°10°3 sp=62mm     65     IXI/m²     ISO 179/1eA       Charpy 23°C, U-notch Edgew 80°10°3 sp=62mm     15     IXI/m²     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     IXI/m²     ISO 179/1eA       THERMAL (¹)       Vicat Softening Temp, Rate B/50     137     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     120     °C     ASTM D648       HDT, 1.82 MPa, 3.2mm, unannealed     120     °C     ASTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ASTM E831       CTE, 40°C to 40°C, flow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2	Izod Impact, unnotched 80*10*3 +23°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     15     kJ/m²     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm     NB     kJ/m²     ISO 179/1eA       THERMAL <sup>(1)</sup> Vicat Softening Temp, Rate B/50     137     °C     ASTM D525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       HDT, 1.82 MPa, 3.2mm, unannealed     120     °C     ASTM D648       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2	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     15     kJ/m²     ISO 179/1eA       Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm     NB     kJ/m²     ISO 179/1eU       THERMAL (¹)       Vicat Softening Temp, Rate B/50     137     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       HDT, 1.82 MPa, 3.2mm, unannealed     120     °C     ASTM D648       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     SO 11359-2       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     10°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     10°C     ISO 100	Izod Impact, notched 80*10*3 -30°C	10	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80°10°3 sp=62mm     NB     kJ/m²     ISO 179/1eU       THERMAL <sup>(1)</sup> Vicat Softening Temp, Rate B/50     137     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       HDT, 1.82 MPa, 3.2mm, unannealed     120     °C     ASTM D648       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 10359-2       CTE, -40°C to 40°C, xflow     10     10     10     10       CTE, -40°C to 40°C, xflow     10     10     10     10     10     10	Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	65	kJ/m²	ISO 179/1eA
THERMAL (1)       Vicat Softening Temp, Rate B/50     137     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       HDT, 1.82 MPa, 3.2 mm, unannealed     120     °C     ASTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       Vicat Softening Temp, Rate B/50     137     °C     ISO 10359-2	Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	15	kJ/m²	ISO 179/1eA
Vicat Softening Temp, Rate B/50     137     °C     ASTM D1525       HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       HDT, 1.82 MPa, 3.2mm, unannealed     120     °C     ASTM D648       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     MSTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       Vicat Softening Temp, Rate B/50     137     °C     ISO 306	Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m²	ISO 179/1eU
HDT, 0.45 MPa, 3.2 mm, unannealed     132     °C     ASTM D648       HDT, 1.82 MPa, 3.2 mm, unannealed     120     °C     ASTM D648       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 306	THERMAL (1)			
HDT, 1.82 MPa, 3.2mm, unannealed   120   °C   ASTM D648     CTE, -40°C to 40°C, flow   6.2E-05   1/°C   ASTM E831     CTE, -40°C to 40°C, xflow   6.2E-05   1/°C   ASTM E831     CTE, -40°C to 40°C, flow   6.2E-05   1/°C   ISO 11359-2     CTE, -40°C to 40°C, xflow   6.2E-05   1/°C   ISO 11359-2     Vicat Softening Temp, Rate B/50   137   °C   ISO 306	Vicat Softening Temp, Rate B/50	137	°C	ASTM D1525
CTE, -40°C to 40°C, flow   6.2E-05   1/°C   ASTM E831     CTE, -40°C to 40°C, xflow   6.2E-05   1/°C   ASTM E831     CTE, -40°C to 40°C, flow   6.2E-05   1/°C   ISO 11359-2     CTE, -40°C to 40°C, xflow   6.2E-05   1/°C   ISO 11359-2     Vicat Softening Temp, Rate B/50   137   °C   ISO 306	HDT, 0.45 MPa, 3.2 mm, unannealed	132	°C	ASTM D648
CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ASTM E831       CTE, -40°C to 40°C, flow     6.2E-05     1/°C     ISO 11359-2       CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       Vicat Softening Temp, Rate B/50     137     °C     ISO 306	HDT, 1.82 MPa, 3.2mm, unannealed	120	°C	ASTM D648
CTE, -40°C to 40°C, flow   6.2E-05   1/°C   ISO 11359-2     CTE, -40°C to 40°C, xflow   6.2E-05   1/°C   ISO 11359-2     Vicat Softening Temp, Rate B/50   137   °C   ISO 306	CTE, -40°C to 40°C, flow	6.2E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow     6.2E-05     1/°C     ISO 11359-2       Vicat Softening Temp, Rate B/50     137     °C     ISO 306	CTE, -40°C to 40°C, xflow	6.2E-05	1/°C	ASTM E831
Vicat Softening Temp, Rate B/50 137 °C ISO 306	CTE, -40°C to 40°C, flow	6.2E-05	1/°C	ISO 11359-2
	CTE, -40°C to 40°C, xflow	6.2E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120     140     °C     ISO 306	Vicat Softening Temp, Rate B/50	137	°C	ISO 306
	Vicat Softening Temp, Rate B/120	140	°C	ISO 306



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	118	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(2)</sup>	80	°C	UL 746B
Relative Temp Index, Mech w/impact (2)	80	°C	UL 746B
Relative Temp Index, Mech w/o impact (2)	89	°C	UL 746B
PHYSICAL (1)			
Specific Gravity	1.22	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm <sup>(3)</sup>	0.6 - 0.8	%	SABIC method
Melt Flow Rate, 300°C/1.2 kgf	10	g/10 min	ASTM D1238
Density	1.23	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.3	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.1	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	9	cm <sup>3</sup> /10 min	ISO 1133
FLAME CHARACTERISTICS (2)			
UL Yellow Card Link	<u>E45329-104199936</u>	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING (4)			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	48	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	295 – 315	°C	
Nozzle Temperature	290 – 310	°C	
Front - Zone 3 Temperature	295 – 315	°C	
Middle - Zone 2 Temperature	280 – 305	°C	
Rear - Zone 1 Temperature	270 – 295	°C	
Mold Temperature	70 – 95	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	40 – 60	%	
Shot to Cylinder Size	40 - 00	70	

<sup>(1)</sup> 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

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> 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**

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