

# CYCOLOYTM FR RESIN RCY6214

## **REGION ASIA**

## **DESCRIPTION**

CYCOLOY RCY6214 resin is an injection moldable PC/ABS blend with non-brominated and non-chlorinated flame retardant. It contains 35% post consumer recycle content with a UL-94 VO rating @ 1.5 mm. Developed for wide variety of applications that require balanced flow and impact performance. Limited availability and restricted color only.

#### TYPICAL PROPERTY VALUES

Revision 20241021

MECHANICA.¹¹¹         Tensile Stress, bit, Type i, 50 mm/min         60         M36         ASTM D638           Tensile Stress, bit, Type i, 50 mm/min         47         M69         ASTM D638           Tensile Strain, Jid, Type i, 50 mm/min         4         S         ASTM D638           Tensile Strain, Jid, Type i, 50 mm/min         40         %         ASTM D638           Tensile Strain, Jid, Type i, 50 mm/min         90         M6a         ASTM D638           Flexural Stress, yid, 1,3 mm/min, 50 mm span         90         M6a         ASTM D790           Flexural Modulus, 1,3 mm/min, 50 mm span         90         M6a         ASTM D790           MPACT 1¹¹         Turn March Modulus, 1,3 mm/min, 50 mm span         50         1/m         ASTM D790           MPACT 1¹¹         Turn March Modulus, 1,3 mm/min, 50 mm span         50         1/m         ASTM D536           MPACT 1¹¹         Turn March Modulus, 1,3 mm/min, 50 mm span         50         1/m         ASTM D536           MPACT 1¹¹         Turn March Modulus, 1,3 mm/min, 50 mm span         50         1/m         ASTM D536           MPACT 1¹¹         Turn March Modulus, 1,3 mm/min, 50 mm span         50         1/m         ASTM D536           MPACT 1¹         March Modulus, 1,3 mm/min, 50 mm span         50         3         <	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Stress, br., Type I, 50 mm/min         47         MPa         ASTM D638           Tensile Strain, Jd., Type I, 50 mm/min         40         %         ASTM D638           Tensile Modulus, 50 mm/min         2500         MPa         ASTM D638           Flexural Stress, Jd. 1.3 mm/min, 50 mm span         90         MPa         ASTM D790           Hexural Modulus, 1.3 mm/min, 50 mm span         90         MPa         ASTM D790           MPACT**         TU         ASTM D790         MPa         ASTM D790           Instrumented Dart Impact Total Energy, 23°C         50         J         ASTM D256           Instrumented Dart Impact Total Energy, 23°C         50         J         ASTM D556           Instrumented Dart Impact Total Energy, 23°C         50         J         ASTM D556           Instrumented Dart Impact Total Energy, 23°C         50         J         ASTM D556           Instrumented Bo*10°3 *+23°C         50         J         ASTM D548           Instrumented Dart Impact Total Energy, 23°C         50         ASTM D548           Instrumented Bo*10°G *+ Septimented Bo*10°G *+ Septimente	MECHANICAL (1)			
Tensile Strain, yld. Type I, 50 mm/min         4         %         ASTM DG38           Tensile Strain, brk, Type I, 50 mm/min         40         %         ASTM DG38           Tensile Modulus, 50 mm/min         2500         MPa         ASTM DG38           Elexural Modulus, 51 mm/min, 50 mm span         400         MPa         ASTM DG30           Blexural Modulus, 1.3 mm/min, 50 mm span         400         MPa         ASTM DG30           IMPACT************************************	Tensile Stress, yld, Type I, 50 mm/min	60	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min         40         %         ASTM D638           Tensile Modulus, 50 mm/min         2500         MPa         ASTM D638           Flexural Nodulus, 13 mm/min, 50 mm span         90         MPa         ASTM D790           Instrumental Stress, yld. 1.3 mm/min, 50 mm span         90         MPa         ASTM D790           Instrumental Data Impact, notched, 23°C         50         Jm         ASTM D256           Instrumentad Dart Impact, notched, 80°10°3 +23°C         50         Jm         ASTM D3763           Izod Impact, notched, 80°10°3 +23°C         50         Jm         ASTM D3763           Izod Impact, notched, 80°10°3 +23°C         50         Jm         ASTM D3763           Izod Impact, notched, 90°10°3 +23°C         50         Jm         ASTM D3763           Izod Impact, notched, 90°10°3 +23°C         50         20         ASTM D484           Izod Impact, notched, 90°10°3 +23°C         80         20         ASTM D548           Izod Impact, notched, 90°10°3 +23°C         80         20         ASTM D548           Izod Impact, notched, 90°10°3 +23°C         80         ASTM D548         ASTM D548           IDO, 13.2 Mm,	Tensile Stress, brk, Type I, 50 mm/min	47	MPa	ASTM D638
Fensile Modulus, 50 mm/min         2500         MPa         ASTM DG38           Flexural Stress, yld, 1.3 mm/min, 50 mm span         90         MPa         ASTM D790           Flexural Modulus, 1.3 mm/min, 50 mm span         2400         MPa         ASTM D790           IMPACT***         VIX.         ASTM D256         ASTM D256           Izod Impact, notched, 23°C         50         J m         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         50         J m         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         50         J m         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         50         J m         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         50         Q         ASTM D484           Izod Impact, notched 80°10°3 +23°C         50         Q         ASTM D525           Izod Impact, notched 80°10°3 +23°C         30         ASTM D525           Izod Impact, notched 80°10°3 +23°C         30         ASTM D526           Izod Impact, notched 80°10°3 +23°C         35         ASTM D526           Izod Impact, notched 80°10°3 +23°C         35         ASTM D526           Izod Impact, notched 80°10°3 +23°C         35         ASTM D526           Izod Impact, notched 80°10°3 +23°C         35<	Tensile Strain, yld, Type I, 50 mm/min	4	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span         90         MPa         ASTM D790           Flexural Modulus, 1.3 mm/min, 50 mm span         2400         MPa         ASTM D296           IMPACT <sup>11</sup> V         V         ASTM D256           Izod Impact, notched, 23°C         500         J m         ASTM D256           Izod Impact, notched 80°10°3 +23°C         50         J m         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         50         J m         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         50         J m         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         50         20         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         90         20         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         30         ASTM D363           Izod Impact, Notched 80°10°3 +23°C         30         ASTM D464           Izod Impact, Notched 80°10°3 +23°C         40         ASTM D648           IDT, 1.82 MPa, 3.2 mm, unannealed         90         20         ASTM D648           IEO, 1.02 Salma, 6.4 mm, unannealed         91         20         ASTM D648           IEO, 2.4 Salma, 6.4 mm, unannealed         85         20         20         ASTM D648	Tensile Strain, brk, Type I, 50 mm/min	40	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span         4400         MPa         ASTM D790           IMPACT <sup>(1)</sup> Izod Impact, notched, 23°C         500         1/m         ASTM D256           Izod Impact, notched, 80°10°3 + 23°C         50         1/m         ASTM D256           Izod Impact, notched 80°10°3 + 23°C         51         20         1/m         ASTM D256           Izod Impact, notched 80°10°3 + 23°C         51         20         2         ASTM D363           Izod Impact, notched 80°10°3 + 23°C         80         60         2         ASTM D1525           HDT, 1.82 MPa, 5.2 mm, unannealed         80         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           CFE, 40°C to 60°C, flow         7.E Cos         ASTM E831           CFE, 40°C to 60°C, flow         7.E Cos         ASTM E831           Relative Temp Index, Mech w/impact (°)         85         °C         U.7 468           Relative Temp Index, Mech w/impact (°)         18         S         °C         U.7 468           Relative Temp Index, Mech w/impact (°)         18         S         S         S         S	Tensile Modulus, 50 mm/min	2500	MPa	ASTM D638
IMPACT (¹)         IX old Impact, notched, 23°C         500         1/m         ASTM D256           Instrumented Dart Impact Total Energy, 23°C         50         1/m         ASTM D3763           Izod Impact, notched 80°10°3 + 23°C         51         kl/m²         15080/1A           THERMAL (¹)           Usical Softening Temp, Rate B/50         100         °C         ASTM D1525           HDT, 1.82 MPa, 3.2 mm, unannealed         85         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         1.160         1/°C         ASTM D648           CE, -40°C to 60°C, flow         7.18-05         1/°C         ASTM D648           CE, 40°C to 60°C, flow         7.26-05         1/°C         ASTM D648           Relative Temp Index, Elec (²)         85         °C         U.746B           Relative Temp Index, Mech w/j impact (²)         85         °C         U.746B           Relative Temp Index, Mech w/j impact (²)         85         °C         U.746B           Water Absorption, (23°C/24hrs)         1.18         S         ASTM D570           Mold Shrinkage, flows, 2.2 mm (³)         0.4 - 0.6         S         ASTM D570	Flexural Stress, yld, 1.3 mm/min, 50 mm span	90	MPa	ASTM D790
Ized Impact, notched, 23°C         500         J/m         ASTM D256           Instrumented Dart Impact Total Energy, 23°C         50         J/m         ASTM D3763           Ized Impact, notched 80°10°3 +23°C         51         J/m         D1/m         ASTM D3763           THERMALI**           Vicas Offening Temp, Rate B/50         C         ASTM D1525           HDT, 1.82 MPa, 3.2mm, unannealed         85         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         101         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         22         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         101         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         22         °C         ASTM D648           CFL, 40°C to 60°C, flow         7.2E05         1/°C         ASTM D648           CFL, 40°C to 60°C, flow         7.2E05         2.0E05         C         U.7468           Relative Temp Index, Mech w/impact (2)         85         °C         U.7468         U.7468           Relative Temp Index, Mech w/impact (2)         1.8         3.2         ASTM D570         ASTM D570	Flexural Modulus, 1.3 mm/min, 50 mm span	2400	MPa	ASTM D790
Instrumented Dark Impact Total Energy, 23°C         50         J         ASTM D3763           Izod Impact, notched 80°10°3 +23°C         51         kJ/m²         ISO 180/1A           THERMAL¹¹¹           Vicat Softening Temp, Rate B/50         100         °C         ASTM D525           HDT, 1.82 MPa, 3.2mm, unannealed         85         °C         ASTM D648           HDT, 0.45 MPa, 6.4 mm, unannealed         101         °C         ASTM D648           DHT, 1.82 MPa, 6.4 mm, unannealed         22         °C         ASTM D648           CFE, 40°C to 60°C, flow         7.1E·05         1/°C         ASTM B831           CFE, 40°C to 60°C, flow         7.2E·05         1/°C         ASTM E831           Relative Temp Index, Elec <sup>(2)</sup> 85         °C         U. 7468           Relative Temp Index, Mech w/impact <sup>(2)</sup> 85         °C         U. 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         °C         U. 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 118         ~         ASTM D792           Water Absorption, (23°C/24hrs)         0.1         %         ASTM D792           Water Absorption, (23°C/24hrs)         0.4 ~ 0.6         %         ASTM D792           Mold Shrinkage, flow	IMPACT (1)			
Izod Impact, notched 80°10'3 +23°C         51         Izona	Izod Impact, notched, 23°C	500	J/m	ASTM D256
THERMAL (*)           Vicat Softening Temp, Rate B/50         100         °C         ASTM D1525           HDT, 1.82 MPa, 3.2mm, unannealed         85         °C         ASTM D648           HDT, 0.45 MPa, 6.4 mm, unannealed         101         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         7.Ee         1°C         ASTM E831           CTE, 40°C to 60°C, flow         7.Ee         1°C         ASTM E831           CTE, 40°C to 60°C, flow         7.Ee         1°C         ASTM E831           Relative Temp Index, Elec (*)         85         °C         U.1 7468           Relative Temp Index, Mech w/ impact (*)         85         °C         U.1 7468           Relative Temp Index, Mech w/ impact (*)         85         °C         MI 7468           Relative Temp Index, Mech w/ impact (*)         18         °C         MI 7468           PHYSICAL (*)         1         *         ASTM D792           Water Absorption, (23°C/24hrs)         0.1         %         ASTM D792           Mold Shrinkage, flow, 3.2 mm (*)         0.4 - 0.6         %         ASTM D123           Melt Flow Rate, 260°C/2.16 kgf         2         M	Instrumented Dart Impact Total Energy, 23°C	50	J	ASTM D3763
Vicat Softening Temp, Rate B/50         100         °C         ASTM D1525           HDT, 1.82 MPa, 3.2mm, unannealed         85         °C         ASTM D648           HDT, 0.45 MPa, 6.4 mm, unannealed         101         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           CTE, 40°C to 60°C, folow         7.16-05         1/°C         ASTM E831           CTE, 40°C to 60°C, xiflow         7.26-05         1/°C         ASTM E831           Relative Temp Index, Blec (²)         85         °C         UL 7468           Relative Temp Index, Mech w/impact (²)         85         °C         UL 7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL 7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL 7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL 7468           Welst Floravity         1.18         °C         ASTM D792           Water Absorption, (23°C/24hrs)         0.4 - 0.6         %         ASTM D570           Mold Shrinkage, flow, 3.2 mm (³)         0.4 - 0.6         %         ASTM D1238           Bell Erion Rate, 260°C/2.16 kgf         2         Mel 7         ASTM D1238<	Izod Impact, notched 80*10*3 +23°C	51	kJ/m²	ISO 180/1A
HOT, 1.82 MPa, 3.2mm, unannealed         85         °C         ASTM D648           HDT, 0.45 MPa, 6.4 mm, unannealed         101         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           CTE, -40°C to 60°C, filow         7.1E-05         1/°C         ASTM E831           CTE, -40°C to 60°C, xiflow         7.2E-05         1/°C         ASTM E831           Relative Temp Index, Elec (²)         85         °C         U.7468           Relative Temp Index, Mech w/impact (²)         85         °C         U.7468           Relative Temp Index, Mech w/o impact (²)         85         °C         U.7468           Relative Temp Index, Mech w/o impact (²)         85         °C         U.7468           Relative Temp Index, Mech w/o impact (²)         85         °C         U.7468           Relative Temp Index, Mech w/o impact (²)         85         °C         U.7468           Relative Temp Index, Mech w/o impact (²)         85         °C         W.7468           Relative Temp Index, Mech w/o impact (²)         1.8         °C         ASTM D792           Mold Shrinkage, flow, 3.2 mm (³)         0.4 -0.6         %         ASTM D570           Mold Shrinkage, flow, 3.2 mm (³)         0.4 -0.6         %<	THERMAL (1)			
HDT, 0.45 MPa, 6.4 mm, unannealed         101         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           CTE, 40°C to 60°C, filow         7.1E05         1/°C         ASTM E831           CTE, 40°C to 60°C, xiflow         7.2E05         1/°C         ASTM E831           Relative Temp Index, Elec (²)         85         °C         UL7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL7468           Relative Temp Index, Mech w/o impact (²)         85         °C         UL7468           Relative Temp Index, Mech w/o impact (²)         85         S         C         WIT468           Relative Temp Index, Mech w/o impact (²)         118         S         C         ASTM D792         C           Water Absorption, (23°C/24hrs)         0.1         8         ASTM D570         ASTM D570 <t< td=""><td>Vicat Softening Temp, Rate B/50</td><td>100</td><td>°C</td><td>ASTM D1525</td></t<>	Vicat Softening Temp, Rate B/50	100	°C	ASTM D1525
HDT, 1.82 MPa, 6.4 mm, unannealed         92         °C         ASTM D648           CTE, 40°C to 60°C, flow         7.16.05         1/°C         ASTM E831           CTE, 40°C to 60°C, xflow         7.26.05         1/°C         ASTM E831           Relative Temp Index, Elec <sup>(2)</sup> 85         °C         UL 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         °C         UL 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         °C         UL 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         °C         UL 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         °C         UL 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         °C         UL 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         °C         UL 7468           Relative Temp Index, Mech w/o impact <sup>(2)</sup> 85         Sast MD 792         Sast MD 792           Welst Flow Right (10°)         9.20°C/2.40°C/2.	HDT, 1.82 MPa, 3.2mm, unannealed	85	°C	ASTM D648
CTE, 40°C to 60°C, flow         7.1E-05         1/°C         ASTM E831           CTE, 40°C to 60°C, xflow         7.2E-05         1/°C         ASTM E831           Relative Temp Index, Elec (²)         85         °C         UL 746B           Relative Temp Index, Mech w/impact (²)         85         °C         UL 746B           Relative Temp Index, Mech w/o impact (²)         85         °C         UL 746B           PHYSICAL (¹)           Specific Gravity         1.18         -         ASTM D792           Water Absorption, (23°C/24hrs)         0.1         %         ASTM D570           Mold Shrinkage, flow, 3.2 mm (³)         0.4 − 0.6         %         SABIC method           Mold Shrinkage, xflow, 3.2 mm (³)         0.4 − 0.6         %         SABIC method           Melt Flow Rate, 260°C/2.16 kgf         21         g/10 min         ASTM D1238           ELECTRICAL (¹)           Hot-Wire Ignition (HWI), PLC 2         23         mm         UL 746A           FLAME CHARACTERISTICS (²)           UL Yellow Card Link         E207780-100937373         -         -           UL Recognized, 94V·0 Flame Class Rating         ≥1,5         mm         UL 94	HDT, 0.45 MPa, 6.4 mm, unannealed	101	°C	ASTM D648
CTE, 40°C to 60°C, xflow7.2E-051/°CASTM E831Relative Temp Index, Elec (2)85°CUL 746BRelative Temp Index, Mech w/impact (2)85°CUL 746BRelative Temp Index, Mech w/o impact (2)85°CUL 746BPHYSICAL (1)Specific Gravity1.18-ASTM D792Water Absorption, (23°C/24hrs)0.1%ASTM D570Mold Shrinkage, flow, 3.2 mm (3)0.4 − 0.6%ASIM CmethodMold Shrinkage, xflow, 3.2 mm (3)0.4 − 0.6%ASIM CmethodMelt Flow Rate, 260°C/2.16 kgf21g/10 minASTM D1238ELECTRICAL (1)≥3mmUL 746AFLAME CHARACTERISTICS (2)Ut Yellow Card Link£207780-100937373Ut Recognized, 94V-0 Flame Class Rating≥1.5mmUL 94	HDT, 1.82 MPa, 6.4 mm, unannealed	92	°C	ASTM D648
Relative Temp Index, Elec (2)85°CUL 746BRelative Temp Index, Mech w/impact (2)85°CUL 746BRelative Temp Index, Mech w/o impact (2)85°CUL 746BPHYSICAL (1)Specific Gravity1.18-ASTM D792Water Absorption, (23°C/24hrs)0.1%ASTM D570Mold Shrinkage, flow, 3.2 mm (3)0.4 - 0.6%SABIC methodMold Shrinkage, xflow, 3.2 mm (3)0.4 - 0.6%SABIC methodMelt Flow Rate, 260°C/2.16 kgf21g/10 minASTM D1238ELECTRICAL (1)23mmUL 746AFLAME CHARACTERISTICS (2)UL Yellow Card LinkE207780-100937373UL Yellow Card Link≥1.5mmUL 94	CTE, -40°C to 60°C, flow	7.1E-05	1/°C	ASTM E831
Relative Temp Index, Mech w/impact (2)85°CUL 746BPHYSICAL (1)Specific Gravity1.18-ASTM D792Water Absorption, (23°C/24hrs)0.1%ASTM D570Mold Shrinkage, flow, 3.2 mm (3)0.4 - 0.6%SABIC methodMolt Shrinkage, xflow, 3.2 mm (3)0.4 - 0.6%SABIC methodMelt Flow Rate, 260°C/2.16 kgf22SABIC methodELECTRICAL (1)********Hot-Wire Ignition (HWI), PLC 22mmUL 746AFLAME CHARACTERISTICS (2)UL Yellow Card Link£207780-100937373-****UL Recognized, 94V-0 Flame Class Rating\$1.5mmUL 94	CTE, -40°C to 60°C, xflow	7.2E-05	1/°C	ASTM E831
Relative Temp Index, Mech w/o impact (2)85°CUL 746BPHYSICAL (1)Specific Gravity1.18-ASTM D792Water Absorption, (23°C/24hrs)0.1%ASTM D570Mold Shrinkage, flow, 3.2 mm (3)0.4 - 0.6%SABIC methodMold Shrinkage, xflow, 3.2 mm (3)0.4 - 0.6%SABIC methodMelt Flow Rate, 260°C/2.16 kgf21y/o minASTM D1238ELECTRICAL (1)****MinUL 746AFLAME CHARACTERISTICS (2)******UL Yellow Card Link£207780-100937373-***UL Recognized, 94V-0 Flame Class Rating≥1.5mmUL 94	Relative Temp Index, Elec <sup>(2)</sup>	85	°C	UL 746B
PHYSICAL (1)  Specific Gravity  1.18  0.1  0.1  0.4 - 0.6  Mold Shrinkage, flow, 3.2 mm (3)  Mold Shrinkage, xflow, 3.2 mm (3)  Discription (Brition (Brition (Britina (B	Relative Temp Index, Mech w/impact (2)	85	°C	UL 746B
Specific Gravity         1.18         - O.1         ASTM D792           Mold Shrinkage, flow, 3.2 mm (3)         0.4 − 0.6         %         ASTM D570           Mold Shrinkage, xflow, 3.2 mm (3)         0.4 − 0.6         %         SABIC method           Melt Flow Rate, 260°C/2.16 kgf         21         g/10 min         ASTM D1238           ELECTRICAL (1)         THOt-Wire Ignition (HWI), PLC 2         ≥3         mm         UL 746A           FLAME CHARACTERISTICS (2)         UL Yellow Card Link         €207780-100937373         -         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	Relative Temp Index, Mech w/o impact (2)	85	°C	UL 746B
Water Absorption, (23°C/24hrs)         0.1         %         ASTM D570           Mold Shrinkage, flow, 3.2 mm (3)         0.4 – 0.6         %         SABIC method           Mold Shrinkage, xflow, 3.2 mm (3)         0.4 – 0.6         %         SABIC method           Melt Flow Rate, 260°C/2.16 kgf         21         g/10 min         ASTM D1238           ELECTRICAL (1)         Thot-Wire Ignition (HWI), PLC 2         ≥3         mm         UL 746A           FLAME CHARACTERISTICS (2)         UL Yellow Card Link         E207780-100937373         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	PHYSICAL (1)			
Mold Shrinkage, flow, 3.2 mm (3)         0.4 − 0.6         %         SABIC method           Mold Shrinkage, xflow, 3.2 mm (3)         0.4 − 0.6         %         SABIC method           Melt Flow Rate, 260°C/2.16 kgf         21         g/10 min         ASTM D1238           ELECTRICAL (1)         THO-Wire Ignition (HWI), PLC 2         ≥3         mm         UL 746A           FLAME CHARACTERISTICS (2)         THAME CHARACTERISTICS (2)         THO-Wire Ignition (HWI) Plane Class Rating         E207780-100937373         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	Specific Gravity	1.18	-	ASTM D792
Mold Shrinkage, xflow, 3.2 mm (3)         0.4 - 0.6         %         SABIC method           Melt Flow Rate, 260°C/2.16 kgf         21         g/10 min         ASTM D1238           ELECTRICAL (1)         FLOW Price Ignition (HWI), PLC 2         ≥3         mm         UL 746A           FLAME CHARACTERISTICS (2)         UL Yellow Card Link         £207780-100937373         -         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	Water Absorption, (23°C/24hrs)	0.1	%	ASTM D570
Melt Flow Rate, 260°C/2.16 kgf         21         g/10 min         ASTM D1238           ELECTRICAL (¹)         FLOW Florition (HWI), PLC 2         23         mm         UL 746A           FLAME CHARACTERISTICS (²)         UL Yellow Card Link         E207780-100937373         -         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	Mold Shrinkage, flow, 3.2 mm <sup>(3)</sup>	0.4 – 0.6	%	SABIC method
ELECTRICAL (¹)           Hot-Wire Ignition (HWI), PLC 2         ≥3         mm         UL 746A           FLAME CHARACTERISTICS (²)           UL Yellow Card Link         E207780-100937373         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	Mold Shrinkage, xflow, 3.2 mm (3)	0.4 – 0.6	%	SABIC method
Hot-Wire Ignition (HWI), PLC 2         ≥3         mm         UL 746A           FLAME CHARACTERISTICS (2)         UL Yellow Card Link         E207780-100937373         -         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	Melt Flow Rate, 260°C/2.16 kgf	21	g/10 min	ASTM D1238
FLAME CHARACTERISTICS <sup>(2)</sup> UL Yellow Card Link	ELECTRICAL (1)			
UL Yellow Card Link         E207780-100937373         -         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	Hot-Wire Ignition (HWI), PLC 2	≥3	mm	UL 746A
UL Yellow Card Link         E207780-100937373         -         -         -           UL Recognized, 94V-0 Flame Class Rating         ≥1.5         mm         UL 94	FLAME CHARACTERISTICS (2)			
UL Recognized, 94V-0 Flame Class Rating ≥1.5 mm UL 94		F207780-100937373	-	-
			mm	III 94



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Recognized, 94HB Flame Class Rating	≥0.3	mm	UL 94
INJECTION MOLDING (4)			
Drying Temperature	80 – 90	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	245 – 275	°C	
Nozzle Temperature	245 – 275	°C	
Front - Zone 3 Temperature	245 – 275	°C	
Middle - Zone 2 Temperature	220 – 265	°C	
Rear - Zone 1 Temperature	220 – 255	°C	
Mold Temperature	60 – 80	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	30 – 80	%	
Vent Depth	0.038 - 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.

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