

# VALOXTM FR RESINS 365

## **REGION AMERICAS**

# **DESCRIPTION**

Unreinforced, opaque, provides chemical resistance and dimensional stability, UL94V-0 rated at 0.031".

## **TYPICAL PROPERTY VALUES**

Revision 20191022

MECHANICAL         Tensile Stress, yld., Type 1, 50 mm/min         41         MPa         ASTM D638           Tensile Stress, brk., Type 1, 50 mm/min         41         MPa         ASTM D638           Tensile Stress, brk., Type 1, 50 mm/min         120         8         ASTM D638           Flexural Stress, brk., 1, 3 mm/min, 50 mm span         68         MPa         ASTM D790           Flexural Modulus, 1, 3 mm/min, 50 mm span         68         MPa         ASTM D790           Hexural Stress, brk., 3 mm/min, 50 mm span         68         MPa         ASTM D790           Hexural Modulus, 1, 3 mm/min, 50 mm span         10         4 MPa         ASTM D790           Hardness, Rockwell R         115         - 2         ASTM D785           Marchaes, Rockwell R         192         J/m         ASTM D256           Lood Impact, notched, 30°C         192         J/m         ASTM D256           Lood Impact, notched, 40°C         170         J/m         ASTM D368           Radidined Gardner, 23°C         37         1         ASTM D368           HOT, 1,82 MPa, 6.4 mm, unannealed         129         C         ASTM D488           HOT, 1,82 MPa, 6.4 mm, unannealed         129         C         ASTM E831           CTE, 40°C to 95°C, flow         32	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Stress, brk, Type I, 50 mm/min         41         MPa         ASTM D638           Tensile Stress, ytk, 1,3 mm/min         120         %         ASTM D638           Flexural Stress, brk, 1,3 mm/min, 50 mm span         68         MPa         ASTM D790           Flexural Stress, brk, 1,3 mm/min, 50 mm span         68         MPa         ASTM D790           Hardness, Rockwell R         15         WB         ASTM D785           IMPACT         WW         ASTM D256         ASTM D785           Izod Impact, notched, 23°C         640         J/m         ASTM D256           Izod Impact, notched, 40°C         192         J/m         ASTM D360           Izod Impact, notched, 40°C         170         J/m         ASTM D3029           Izod Impact, notched, 40°C         37         1         ASTM D3029           Izod Impact, notched, 40°C         37         0         ASTM D3029           Izod Impact, notched, 40°C         37         0         ASTM D3029           Izod Impact, notched, 40°C         38         36         35         ASTM D3029           Ibrough Edwick College Carles         48         60         1         MC         ASTM D3029           Ibrough Edwick College Carles         29         2         ASTM D302	MECHANICAL			
Tensile Strain, brk. Type I. 50 mm /min         120         %         ASTM D683           Flexural Stress, Juk. 1.3 mm /min, 50 mm span         68         MPa         ASTM D790           Flexural Modulus, 1.3 mm /min, 50 mm span         2240         MPa         ASTM D790           Hardness, Rockwell R         115         -         ASTM D785           IMPACT           Lood Impact, notched, 23°C         640         Jm         ASTM D256           Lood Impact, notched, 30°C         192         Jm         ASTM D256           Lood Impact, notched, 40°C         170         Jm         ASTM D256           Lood Impact, notched, 40°C         37         Jm         ASTM D3029           Modified Gardner, 23°C         37         Jm         ASTM D3029           Modified Gardner, 23°C         37         Sm         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         129         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         129         °C         ASTM E831           CTE, 40°C to 40°C, flow         28260         Jr°C         ASTM E831           CTE, 40°C to 58°C, flow         10         Vm         UT.466           Relative Temp Index, Mech W/n impact         10         Vm	Tensile Stress, yld, Type I, 50 mm/min	41	MPa	ASTM D638
Flexural Stress, byd. 1.3 mm/min, 50 mm span         68         MPa         ASTM D790           Flexural Stress, brk, 1.3 mm/min, 50 mm span         68         MPa         ASTM D790           Flexural Modulus, 1.3 mm/min, 50 mm span         2240         MPa         ASTM D790           Hardness, Rockwell R         15         -         ASIM D256           IMPACT         ************************************	Tensile Stress, brk, Type I, 50 mm/min	41	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span         68         MPa         ASTM D790           Flexural Modulus, 1.3 mm/min, 50 mm span         2240         MPa         ASTM D790           Hardness, Rockwell R         115         - Warm         ASTM D785           MPACT         TURN         ASTM D256         TURN         ASTM D256           Izod Impact, notched, 33°C         192         J/m         ASTM D256           Izod Impact, notched, 40°C         70         J/m         ASTM D256           Gardner, 23°C         37         J         ASTM D3029           Modified Gardner, 23°C         37         J         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         121         °         C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         121         °         C         ASTM D648           CTE, 40°C to 40°C, flow         92e.05         1/°         ASTM E831           CTE, 40°C to 40°C, flow         92e.05         1/°         ASTM E831           CTE, 40°C to 138°C, flow         92e.05         1/°         ASTM E831           Relative Temp Index, Mech w/ jimpact         105         °         U.7468           Relative Temp Index, Mech w/ jimpact         133         ASTM D570 <tr< td=""><td>Tensile Strain, brk, Type I, 50 mm/min</td><td>120</td><td>%</td><td>ASTM D638</td></tr<>	Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span         2400         MPa         ASTM D790           Hardness, Rockwell R         15         -         ASTM D785           IMPACT         V         ASTM D256           Lood Impact, notched, -30°C         60         J/m         ASTM D256           Lood Impact, notched, -40°C         192         J/m         ASTM D256           Lood Impact, notched, -40°C         170         J/m         ASTM D256           Lood Impact, notched, -40°C         37         J/m         ASTM D3029           Modified Gardner, 23°C         37	Flexural Stress, yld, 1.3 mm/min, 50 mm span	68	MPa	ASTM D790
Hardness, Rockwell R         115	Flexural Stress, brk, 1.3 mm/min, 50 mm span	68	MPa	ASTM D790
IMPACT         Izod Impact, notched, 23°C         640         J/m         ASTM D256           Izod Impact, notched, 30°C         192         J/m         ASTM D256           Izod Impact, notched, 40°C         170         J/m         ASTM D256           Izod Impact, notched, 40°C         37         J         ASTM D3029           Modified Gardner, 23°C         37         J         ASTM D3029           Modified Gardner, 23°C         37         STM D408         ASTM D3029           HDT, 0.58 MPa, 6.4 mm, unannealed         129         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         21         21         C         ASTM D648           CTE, 40°C to 40°C, flow         2,926.05         1/°C         ASTM B831           CTE, 40°C to 40°C, flow         1,92         ASTM E831           CTE, 40°C to 40°C, flow         1,92         ASTM E831           CTE, 40°C to 138°C, flow         2,826.05         1/°C         ASTM E831           CREd to Table, Mech w/impact         105         °C         U. 7468           Relative Temp Index, Mech w/impact         105         °C         ASTM D792           Specific Gravity         33         °C         ASTM D792           Specific Gravity         20	Flexural Modulus, 1.3 mm/min, 50 mm span	2240	MPa	ASTM D790
Ized Impact, notched, 3°C         640         Jm         ASM D256           Ized Impact, notched, 40°C         170         Jm         ASM D256           Gardiner, 2°C         370         Jm         ASM D256           Gardner, 2°C         370         Jm         ASM D256           Gardner, 2°C         370         Jm         ASM D302           Modified Gardner, 23°C         370         Jm         ASM D303           THERMA         V         C         ASM D408           HDT, 0.45 MPa, 6.4 mm, unannealed         129         °C         ASM D648           CTE, 40°C to 40°C, flow         52.65         1°C         ASTM D648           CTE, 40°C to 40°C, flow         52.65         1°C         ASTM E831           CTE, 60°C to 138°C, flow         2.826.03         1°C         ASTM E831           CTE, 60°C to 138°C, flow         10         C         ASTM E831           Relative Temp Index, Mech w/jimpact         10         C         U.7468           Relative Temp Index, Mech w/jimpact         10         S         MID 792           Specific Gravity         3         S         MID 792           Specific Gravity         4         ASTM D792         ASTM D792           Water Ab	Hardness, Rockwell R	115	-	ASTM D785
Ized Impact, notched, -30°C         192         J/m         ASTM D256           Ized Impact, notched, -40°C         170         J/m         ASTM D256           Gardner, 23°C         37         J         ASTM D3029           Modified Gardner, 23°C         37         J         ASTM D3029           THERMAL           THERMAL           HDT, -182 MPa, 6.4 mm, unannealed         129         °C         ASTM D648           HDT, -182 MPa, 6.4 mm, unannealed         121         °C         ASTM D648           CTE, -40°C to 40°C, flow         6.84E-05         1/°C         ASTM E831           CTE, -40°C to 95°C, flow         7.92E-05         1/°C         ASTM E831           CTE, 60°C to 138°C, flow         8.28E-05         1/°C         ASTM E831           CTE, 60°C to 138°C, flow         0.05         °C         UL 7468           Relative Temp Index, Mech w/impact         105         °C         UL 7468           Relative Temp Index, Mech w/impact         1.33         S         ASTM D792           Specific Volume         1.33         S         ASTM D792           Specific Volume         0.14         %	IMPACT			
Ize of Impact, notched, 40°C         170         J/m         ASTM D3626           Gardner, 23°C         37         J         ASTM D3029           Modified Gardner, 23°C         37         J         ASTM D3029           THERMAL           THE MDT, 1.82 MPa, 6.4 mm, unannealed         192         °C         ASTM D648           DDT, 1.82 MPa, 6.4 mm, unannealed         292         ASTM D648         ASTM D648           CTE, 40°C to 40°C, flow         1,°C         ASTM E831         ASTM E831           CTE, 40°C to 40°C, flow         2,926-05         1,°C         ASTM E831           CTE, 60°C to 138°C, flow         8,286-05         1,°C         ASTM E831           Relative Temp Index, Mech w/impact         105         °C         U.7468           Relative Temp Index, Mech w/impact         105         °C         U.7468           Relative Temp Index, Mech w/impact         133         S         ASTM D792           Specific Gravity         133         S         ASTM D792           Specific Volume         2,75         ASTM D570           Water Absorption, (23°C/24rs)         0,6         3         ASTM D570           Mold Shrinkage, flow, 0.75-2.3 mm         0,9         3         ASIC method	Izod Impact, notched, 23°C	640	J/m	ASTM D256
Gardner, 23°C         37         J         ASTM D3029           Modified Gardner, 23°C         37         J         ASTM D3029           THERMAL           HDT, 0.45 MPa, 6.4 mm, unannealed         129         °C         ASTM D648           HDT, 1.82 MPa, 6.4 mm, unannealed         121         °C         ASTM E831           CTE, 40°C to 40°C, flow         5.92E-05         1/°C         ASTM E831           CTE, 40°C to 138°C, flow         7.92E-05         1/°C         ASTM E831           Relative Temp Index, Elec         105         °C         U.7468           Relative Temp Index, Mech w/impact         105         °C         U.746B           Relative Temp Index, Mech w/o impact         105         °C         U.746B           Relative Temp Index, Mech w/o impact         105         °C         U.746B           Relative Temp Index, Mech w/o impact         105         °C         U.746B           Specific Gravity         20         M.746B         N.746B           Specific Gravity         5.02         ASTM D792           Specific Volume         6.8         ASTM D792           Water Absorption, (23°C/24hrs)         6.8         1.1         6.8	Izod Impact, notched, -30°C	192	J/m	ASTM D256
Modified Gardner, 23°C         37         1         ASTM D3029           THERMAL         C         ASTM D648           HDT, 0.45 MPa, 6.4 mm, unannealed         129         °C         ASTM D648           CTC, 40°C to 40°C, flow         1.21         °C         ASTM E831           CTE, 40°C to 40°C, flow         1.7°C         ASTM E831           CTE, 40°C to 13°C, flow         1.7°C         ASTM E831           CTE, 40°C to 13°C, flow         2.826.05         1.7°C         ASTM E831           CTE, 40°C to 13°C, flow         2.826.05         1.7°C         ASTM E831           CTE, 40°C to 13°C, flow         2.826.05         1.7°C         ASTM E831           CTE, 40°C to 13°C, flow         2.826.05         1.7°C         ASTM E831           CTE, 40°C to 13°C, flow         2.826.05         1.7°C         ASTM E831           CTE, 40°C to 13°C, flow         2.826.05         2.2         ASTM E831           CTE, 40°C to 13°C, flow         1.33         2.2         ASTM D792           Specific Gravity         1.33         2.2         ASTM D792           Water Absorption, (23°C/24trs)         0.6         3.2         ASTM D792           Water Absorption, (23°C/24trs)         0.8         ASTM D570           Wo	Izod Impact, notched, -40°C	170	J/m	ASTM D256
HDT, 0.45 MPa, 6.4 mm, unannealed 129 °C ASTM D648 HDT, 1.82 MPa, 6.4 mm, unannealed 121 °C ASTM D648  HDT, 1.82 MPa, 6.4 mm, unannealed 121 °C ASTM D648  CTE, 40°C to 40°C, flow 6.84E-05 1/°C ASTM E831  CTE, 40°C to 95°C, flow 7.92E-05 1/°C ASTM E831  CTE, 40°C to 138°C, flow 8.28E-05 1/°C ASTM E831  CTE, 60°C to 138°C, flow 8.28E-05 1/°C ASTM E831  Relative Temp Index, Mech w/impact 105 °C UL 7468  Relative Temp Index, Mech w/impact 105 °C UL 7468  Relative Temp Index, Mech w/impact 105 °C UL 7468  Relative Temp Index, Mech w/o impact 105 °C UL 7468  Relative Temp Index, Mech w/o impact 105 °C UL 7468  Relative Temp Index, Mech w/o impact 105 °C UL 7468  Relative Temp Index, Mech w/o impact 105 °C UL 7468  Relative Temp Index, Mech w/o impact 105 °C UL 7468  Relative Temp Index, Mech w/o impact 105 °C VI	Gardner, 23°C	37	J	ASTM D3029
HDT, 0.45 MPa, 6.4 mm, unannealed  HDT, 1.82 MPa, 6.4 mm, unannealed  121  6.84 E-05  6.84 E-05  7.92 E-05  7.92 E-05  8.28 E-05  1.1°C  3.5 M E831  CTE, 40°C to 40°C, flow  3.28 E-05  7.92 E-05  8.28 E-05  1.1°C  3.5 M E831  CTE, 60°C to 138°C, flow  3.28 E-05  8.28 E-05  1.1°C  3.5 M E831  CTE, 60°C to 138°C, flow  4.2 M E831  CTE, 60°C to 138°C, flow  4.2 M E831  CTE, 60°C to 138°C, flow  5.2 M E831  CTE, 60°C to 138°C, flow  6.2 M E831  CTE, 60°C to 138°C, flow  6.2 M E831  CTE, 60°C to 138°C, flow  7.0 M E831  CTE, 60°C to 138°C, flow  8.28 E-05  1.1°C  8.2 M E831  1.1°C  8.2 M E831  1.1°C  8.3 M E83  1.1°C	Modified Gardner, 23°C	37	J	ASTM D3029
HDT, 1.82 MPa, 6.4 mm, unannealed  CTE, -40°C to 40°C, flow  CTE, -40°C to 40°C, flow  7.92E-05  CTE, -40°C to 138°C, flow  8.28E-05  CTE, 60°C to 138°C, flow  8.28E-05  CTE, 60°C to 138°C, flow  8.28E-05  CTE, 60°C to 138°C, flow  10°C  1	THERMAL			
CTE, 40°C to 40°C, flow         6.84E.05         1/°C         ASTM E831           CTE, 40°C to 95°C, flow         7.92E.05         1/°C         ASTM E831           CTE, 60°C to 138°C, flow         8.28E.05         1/°C         ASTM E831           Relative Temp Index, Elec         105         °C         UL 7468           Relative Temp Index, Mech w/impact         105         °C         UL 7468           Relative Temp Index, Mech w/o impact         105         °C         UL 7468           PHYSICAL           Specific Gravity         1.33         -         ASTM D792           Specific Volume         0.75         m²/g         ASTM D792           Water Absorption, (23°C/24hrs)         0.14         %         ASTM D792           Water Absorption, (23°C/24hrs)         0.8-1.1         %         ASTM D790           Water Absorption, (23°C/24hrs)         0.8-1.1         %         ASTM D790           Mold Shrinkage, flow, 0.75-2.3 mm         0.8-1.1         %         ASIM D790           Mold Shrinkage, flow, 0.75-2.3 mm         0.9-1.3         %         ASIM D80           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2-1.6         X//m         ASIM D80           Bibliothy Call         XIIIIIIIIIIIIIIIIIIII	HDT, 0.45 MPa, 6.4 mm, unannealed	129	°C	ASTM D648
CFE, 40°C to 95°C, flow         7,92E-05         1/°C         ASTM E831           CFE, 60°C to 138°C, flow         8,28E-05         1/°C         ASTM E831           Relative Temp Index, Elec         105         °C         UL 746B           Relative Temp Index, Mech w/impact         105         °C         UL 746B           Relative Temp Index, Mech w/o impact         105         °C         UL 746B           PHYSICAL           Specific Gravity         1,33         -         ASTM D792           Specific Volume         0,75         3/°g         ASTM D792           Water Absorption, (23°C/24hrs)         0,14         %         ASTM D570           Water Absorption, (23°C/saturated)         0,8 − 1.1         %         ASTM D570           Mold Shrinkage, flow, 0.75-2.3 mm         0,8 − 1.1         %         ASIC method           Mold Shrinkage, xflow, 0.75-2.3 mm         0,9 − 1.3         %         ASIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1,2 − 1.6         %         ASIC method           Biolectric Strength, in oil, 3.2 mm         12         W//m         ASIM D149           Biolectric Strength, in oil, 3.2 mm         8.5         Mold Shrinkage         I/v/m         ASIM D149	HDT, 1.82 MPa, 6.4 mm, unannealed	121	°C	ASTM D648
CTE, 60°C to 138°C, flow8.28E-051/°CASTM E831Relative Temp Index, Elec105°CUL 746BRelative Temp Index, Mech w/impact105°CUL 746BRelative Temp Index, Mech w/o impact105°CUL 746BPHYSICALSpecific Gravity1.33SSSASTM D792Specific Volume0.75cm³/gASTM D792Water Absorption, (23°C/24hrs)0.14%ASTM D570Water Absorption, (23°C/Saturated)0.8-1.1%ASTM D570Mold Shrinkage, flow, 0.75-2.3 mm0.8-1.1%SABIC methodMold Shrinkage, xflow, 0.75-2.3 mm0.9-1.3%SABIC methodMold Shrinkage, xflow, 0.75-2.3 mm0.9-1.3%SABIC methodMold Shrinkage, xflow, 2.3-4.6 mm1.2-1.6%SABIC methodELECTRICALW/mmASTM D149ELECTRICALSABIC methodASTM D149Relative Permittivity, 100 Hz8.5SEW/mmASTM D149	CTE, -40°C to 40°C, flow	6.84E-05	1/°C	ASTM E831
Relative Temp Index, Elec Relative Temp Index, Mech w/impact Relative Temp Index, Mech w/o impact Relative Temp Index Index Relative Temp Index Index Relative Temp Index Index Relative Temp Inde	CTE, -40°C to 95°C, flow	7.92E-05	1/°C	ASTM E831
Relative Temp Index, Mech w/impact         105         °C         UL 746B           Relative Temp Index, Mech w/o impact         105         °C         UL 746B           PHYSICAL           Specific Gravity         1.33         -         ASTM D792           Specific Volume         0.75         cm³/g         ASTM D570           Water Absorption, (23°C/24hrs)         0.14         %         ASTM D570           Water Absorption, (23°C/Saturated)         0.6         %         ASTM D570           Mold Shrinkage, flow, 0.75-2.3 mm         0.8 – 1.1         %         SABIC method           Mold Shrinkage, flow, 0.75-2.3 mm         0.9 – 1.3         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2 – 1.6         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2 – 1.6         KV/mm         ASTM D149           ELECTRICAL         KV/mm         ASTM D149           Bielectric Strength, in oil, 3.2 mm         12         KV/mm         ASTM D149           Relative Permittivity, 100 Hz         8.5         S         ASTM D150	CTE, 60°C to 138°C, flow	8.28E-05	1/°C	ASTM E831
Relative Temp Index, Mech w/o impact 105 °C UL 746B  PHYSICAL  Specific Gravity 1.33	Relative Temp Index, Elec	105	°C	UL 746B
PHYSICAL  Specific Gravity  Specific Volume  O,75  Water Absorption, (23°C/24hrs)  Mold Shrinkage, flow, 0.75-2.3 mm  Mold Shrinkage, xflow, 2.3-4.6 mm  Mol	Relative Temp Index, Mech w/impact	105	°C	UL 746B
Specific Gravity1.33- Carman (Carman Company)ASTM D792Specific Volume0.75cm³/gASTM D792Water Absorption, (23°C/24hrs)0.14%ASTM D570Water Absorption, (23°C/Saturated)0.6%ASTM D570Mold Shrinkage, flow, 0.75-2.3 mm0.8-1.1%SABIC methodMold Shrinkage, xflow, 2.3-4.6 mm1-1.4%SABIC methodMold Shrinkage, xflow, 0.75-2.3 mm0.9-1.3%SABIC methodMold Shrinkage, xflow, 2.3-4.6 mm1.2-1.6%SABIC methodELECTRICALLECTRICALKV/mmASTM D149Relative Permittivity, 100 Hz8.54.5ASTM D150	Relative Temp Index, Mech w/o impact	105	°C	UL 746B
Specific Volume  Vater Absorption, (23°C/24hrs)  Vater Absorption, (23°C/24hrs)  Vater Absorption, (23°C/34hrs)  Vater Absorption, (23°C/24hrs)  Vater Absorpt	PHYSICAL			
Water Absorption, (23°C/24hrs)         0.14         %         ASTM D570           Water Absorption, (23°C/Saturated)         0.6         %         ASTM D570           Mold Shrinkage, flow, 0.75-2.3 mm         0.8 – 1.1         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1 – 1.4         %         SABIC method           Mold Shrinkage, xflow, 0.75-2.3 mm         0.9 – 1.3         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2 – 1.6         %         SABIC method           ELECTRICAL         X         SASIM D149           Beleiter Strength, in oil, 3.2 mm         12         X         X         ASTM D150	Specific Gravity	1.33	-	ASTM D792
Water Absorption, (23°C/Saturated)         0.6         %         ASTM D570           Mold Shrinkage, flow, 0.75-2.3 mm         0.8 – 1.1         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1 – 1.4         %         SABIC method           Mold Shrinkage, xflow, 0.75-2.3 mm         0.9 – 1.3         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2 – 1.6         %         SABIC method           ELECTRICAL           Dielectric Strength, in oil, 3.2 mm         12         kV/mm         ASTM D149           Relative Permittivity, 100 Hz         8.5         -         ASTM D150	Specific Volume	0.75	cm³/g	ASTM D792
Mold Shrinkage, flow, 0.75-2.3 mm         0.8 – 1.1         %         SABIC method           Mold Shrinkage, flow, 2.3-4.6 mm         1 – 1.4         %         SABIC method           Mold Shrinkage, xflow, 0.75-2.3 mm         0.9 – 1.3         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2 – 1.6         %         SABIC method           ELECTRICAL         Vimm         ASTM D149           Relative Permittivity, 100 Hz         8.5         -         ASTM D150	Water Absorption, (23°C/24hrs)	0.14	%	ASTM D570
Mold Shrinkage, flow, 2.3-4.6 mm         1 – 1.4         %         SABIC method           Mold Shrinkage, xflow, 0.75-2.3 mm         0.9 – 1.3         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2 – 1.6         %         SABIC method           ELECTRICAL         ELECTRICAL           Dielectric Strength, in oil, 3.2 mm         12         kV/mm         ASTM D149           Relative Permittivity, 100 Hz         8.5         -         ASTM D150	Water Absorption, (23°C/Saturated)	0.6	%	ASTM D570
Mold Shrinkage, xflow, 0.75-2.3 mm         0.9 – 1.3         %         SABIC method           Mold Shrinkage, xflow, 2.3-4.6 mm         1.2 – 1.6         %         SABIC method           ELECTRICAL         ELECTRICAL in oil, 3.2 mm         12         kV/mm         ASTM D149           Relative Permittivity, 100 Hz         8.5         -         ASTM D150	Mold Shrinkage, flow, 0.75-2.3 mm	0.8 – 1.1	%	SABIC method
Mold Shrinkage, xflow, 2.3-4.6 mm  1.2 – 1.6  ELECTRICAL  Dielectric Strength, in oil, 3.2 mm  12  8.5  8.5  8.5  8.6  8.6  8.6  8.6  8.6	Mold Shrinkage, flow, 2.3-4.6 mm	1 – 1.4	%	SABIC method
ELECTRICAL           Dielectric Strength, in oil, 3.2 mm         12         kV/mm         ASTM D149           Relative Permittivity, 100 Hz         8.5         -         ASTM D150	Mold Shrinkage, xflow, 0.75-2.3 mm	0.9 – 1.3	%	SABIC method
Dielectric Strength, in oil, 3.2 mm12kV/mmASTM D149Relative Permittivity, 100 Hz8.5-ASTM D150	Mold Shrinkage, xflow, 2.3-4.6 mm	1.2 – 1.6	%	SABIC method
Relative Permittivity, 100 Hz 8.5 - ASTM D150	ELECTRICAL			
	Dielectric Strength, in oil, 3.2 mm	12	kV/mm	ASTM D149
Relative Permittivity, 1 MHz 5.7 - ASTM D150	Relative Permittivity, 100 Hz	8.5	-	ASTM D150
	Relative Permittivity, 1 MHz	5.7	-	ASTM D150



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dissipation Factor, 100 Hz	0.002	-	ASTM D150
Dissipation Factor, 1 MHz	0.03	-	ASTM D150
Arc Resistance, Tungsten {PLC}	6	PLC Code	ASTM D495
Hot Wire Ignition (PLC)	2	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	3	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Yellow Card Link	E121562-220790	-	-
UL Recognized, 94V-0 Flame Class Rating	0.76	mm	UL 94
UL Recognized, 94-5VA Flame Class Rating	2.2	mm	UL 94
Oxygen Index (LOI)	28.8	%	ASTM D2863
UV-light, water exposure/immersion	F2	-	UL 746C
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	12	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	250 – 265	°C	
Nozzle Temperature	245 – 260	°C	
Front - Zone 3 Temperature	250 – 265	°C	
Middle - Zone 2 Temperature	245 – 260	°C	
Rear - Zone 1 Temperature	240 – 255	°C	
Mold Temperature	50 – 75	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	50 – 100	rpm	
Shot to Cylinder Size	40 – 80	%	
Vent Depth	0.025 - 0.038	mm	

#### **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.