

SABIC® PC RESIN PC2203R

POLYCARBONATE FOR GENERAL PURPOSE MOLDING MARKET REGION EUROPE

DESCRIPTION

PC2203R resin is a high flow (MFR = 22 at 300?C/1.2kg), heat and UV stabilized, polycarbonate product with mold release designed for use in the general purpose molding market.

TYPICAL APPLICATIONS

PC Resin PC2203R is designed for use in the general purpose molding market.

TYPICAL PROPERTY VALUES

Revision 20220619

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min (1)	63	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	>70	%	ASTM D638
Tensile Modulus, 50 mm/min	2350	MPa	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	2300	MPa	ASTM D790
Hardness, Rockwell R	120	-	ASTM D785
Tensile Stress, yield, 50 mm/min	63	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	>70	%	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	2300	MPa	ISO 178
Hardness, Rockwell R	120	-	ISO 2039-2
IMPACT			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C	640	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	55	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	12	kJ/m²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate B/50	140	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm	133	°C	ASTM D648
HDT, 1.82 MPa, 3.2 mm	122	°C	ASTM D648
CTE, -40°C to 95°C, flow	7.E-05	1/°C	ASTM E831
Thermal Conductivity	0.2	W/m-°C	ASTM C177
Thermal Conductivity	0.2	W/m-°C	ISO 8302
CTE, 23°C to 80°C, flow	7.E-05	1/°C	ISO 11359-2



HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 122 °C SO 75 /8f HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 122 °C SO 75 /8f HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 122 °C SO 75 /8f HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 122 °C SO 75 /8f HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 122 °C SO 75 /8f HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 122 °C SO 75 /8f PNSECHIC Gravity 122 °C SO SO 75 /8f Water Absorption, (23*C/saturated) 123 °C SO 75 °C SO 7				
Vical Softening Temp, Rate 8/150 140 "C ISO 3066 HOT/RIA, 138 MP Flatw 80°10*4 spe-64mm 123 "C ISO 75/81 BOT/RIA, 138 MP Flatw 80°10*4 spe-64mm 122 "C ISO 75/14 PIVISIOLI "Security 4 ARTM D792 Water Abnorphon, (23°C/Saturated) 0.5 – 0.7 \$ ARTM D797 Modd Shrinkage, flow, 3.2 mm ¹⁰ 0.5 – 0.7 \$ ABIC method Modd Shrinkage, flow, 3.2 mm ¹⁰ 0.5 – 0.7 \$ ABIC method Modd Shrinkage, flow, 3.2 mm ¹⁰ 0.2 2 (10 mm) ABIC method Modd Shrinkage, flow, 3.2 mm ¹⁰ 0.2 2 (10 mm) ABIC method Modd Shrinkage, flow, 3.2 mm ¹⁰ 0.2 2 (10 mm) ABIC method Modd Shrinkage, flow, 3.2 mm ¹⁰ 1.2 (2 mm) (3 mm) ABIC method Modd Shrinkage, flow, 3.2 mm ¹⁰ 4.2 (3 mm) (3 mm) ABIC method Water Abnorplon, C23°C (saturated) 0.3 (3 mm) ABIC method Water Abnorplon, C23°C (saturated) 2.0 (3 mm) <th>PROPERTIES</th> <th>TYPICAL VALUES</th> <th>UNITS</th> <th>TEST METHODS</th>	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT JRL, 0.45 MP Flatux 80*10*4 spie64mm 133 *C ISO 75 /81 HDT JAL, 1.8 MP Flatux 80*10*4 spie64mm 122 *C ISO 75 /81 PHYNSICAL Specific Cravity 1.2 - ASTM D792 Watter Absorption, (23*C) Saturated) 0.35 % ASTM D870 Mold Shrinkage, flow 3.2 mm ¹⁰ 0.5−0.7 % SABC method Mold Shrinkage, flow 3.2 mm ¹⁰ 0.5−0.7 % SABC method Melt Row Kate, 300*C/1.2 kgf 22 9,10 mm SIM D128 Water Absorption, 23*C / saturated) 0.35 % 10.70 mm SIM D128 Water Absorption, 23*C / saturated) 0.35 % NO 50-21 MISS Water Absorption, 23*C / saturated) 0.35 % RM 1003 MISS Water Absorption, 23*C / saturated) 0.35 % ASIM D1023 MISS Male Row Mark Assorption (23*C / saturated) 0.35 % ASIM D103 MISS Male Collection (24*C / saturated) 0.35 % ASIM D103 MISS MISS Elight Transmission,	Ball Pressure Test, 125°C +/- 2°C, by VDE	Passes	-	IEC 60695-10-2
HDT/AL 1.8 MPa Platw 80*10*4 sp-64mm 122 "C SO 75/Ai PHYSICAL Weter Absorption (23°C (Saturated) 0.35 3.6	Vicat Softening Temp, Rate B/50	140	°C	ISO 306
PHYSICAL Specific Cardity 1.2 . ASIM D792 Specific Cardity 0.35 % ASIM D570 Modd Shrinkage, no Tersile Bar, flow, 19° 0.5 – 0.7 % Selfic method Mold Shrinkage, 16w, 3.2 mm 19° 2.2 91 mg ASTM D1238 Bulk Density 1.2 kg/m² K50 183 Water Absorption, (23°C jaturated) 0.55 % 60 62-1 Water Absorption, (23°C jaturated) 0.59 % 60 62-1 Water Absorption, (23°C jaturated) 0.58 % 60 62-1 Water Absorption, (23°C jaturated) 0.58 % 60 62-1 Water Absorption, (23°C jaturated) 8.8 90 % 30 62-1 Water Absorption, (23°C jaturated) 8.8 90	HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	133	°C	ISO 75/Bf
Specific Cravity 1.2 3.5 M DP2 Water Absorption, (23°C/Saturated) 0.35 % SAM DP3 Mold Shrinkage, now, 3.2 mm. 100 0.5 – 0.7 % SAM Commended Mold Shrinkage, now, 3.2 mm. 100 2.2 yl nim ASTM D1238 Mold Density 1.2 4 mm 50 G2 1 Water Absorption, (23°C/saturated) 0.35 % mm of 10 mm 50 G2 1 Melk Volume Rate, MVR at 300°C/1.2 kg 2 1.2 4 mm of 10 mm 50 G2 1 Melk Volume Rate, MVR at 300°C/1.2 kg 2 1.2 4 mm of 10 mm 50 G2 1 Melk Volume Rate, MVR at 300°C/1.2 kg 2 1.2 4 mm of 10 mm 50 G2 1 Melk Volume Rate, MVR at 300°C/1.2 kg 4.8 9.0 5 mm of 10 mm 50 G2 1 Melk Volume Rate, MVR at 300°C/1.2 kg 4.8 9.0 4 Mm of 50 Mm 50 G2 1 Maker, 2.54 mm 4.8 9.0 4 Mm of 50 Mm 60 Mm of 50 Mm 60 Mm Maker, 2.54 mm 4.8 9.0 4.8 7 Mm of 50 Mm 60 Mm 60 Mm 60 Mm 60 Mm 60 Mm	HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	122	°C	ISO 75/Af
Water Absorption, [23°C/Saturated] 0.35 % ASTM D570 Mold Shrinkage on Tensile Bart, flow ¹³ 0.5 – 0.7 % SABIC method Mold Shrinkage, flows, 3.2 mm ¹³ 22 g/10 min ASTM D1238 Bulk Densily 1.2 kg/m² SD 1183 Water Absorption, (23°C/saturated) 0.35 % 150 62-1 Water Absorption, (23°C/saturated) 0.35 % ASTM D100 Water Absorption, (23°C/saturated) 8 9 8 9 0.05 2 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	PHYSICAL			
Mold Shrinkage, flow, 3.2 mm ^(a) 0.5 – 0.7 % SABIC method Mold Shrinkage, flow, 3.2 mm ^(a) 0.5 – 0.7 % SABIC method Molt How Rate, 300°C/1.2 kgl 2 g/10 min ASTIM D1238 Bulk Density 1.2 kg/m² SO 1183 Water Absorption, (23°C/saturated) 2.3 % 150 62-1 Melt Volume Rate, MVR at 300°C/1.2 kg 2.8 % 150 62-1 Melt Volume Rate, MVR at 300°C/1.2 kg 88 – 90 % ASTIM D1003 Haze, 2.54 mm 40.8 % ASTIM D1003 Haze, 2.54 mm 1.586 % ASTIM D150 Refractive Index 1.586 % ASTIM D542 Refractive Index 1.586 % ASTIM D542 Beltake Permittivity, 40 Mtz 3 % ASTIM D150 Belative Permittivity, 60 Hz 3 % ASTIM D150 Belsiation Factor, 1 Mtrz 0.01 % ASTIM D150 Dissipation Factor, 1 Mtrz 0.01 % EC 60053 Relative Permittivity, 50 Hz	Specific Gravity	1.2	-	ASTM D792
Mold Shrinkage, Row, 3.2 mm ⁽³⁾ 0.5 – 0.7 % SAIC method Mell Flow Rate, 300°C/1.2 kgf 22 g/10m ASTM D1238 Water Absorption, (23°C/saturated) 0.35 % 100-21 Mell Wolme Rate, MVR at 300°C/1.2 kg 21 m²/10min 150 133 Mott Volume Rate, MVR at 300°C/1.2 kg 88 – 90 % ASTM D1003 Haze, 2.54 mm 6.8 9 ASTM D1003 Refractive Index 1.58 0 ASTM D1003 Refractive Index 1.58 0 ASTM D1257 Refractive Index 1.58 0 ASTM D1003 Refractive Index 3 0 ASTM D1003 Relative Permittivity, 1 MHz 3 0 0 ASTM D1003 Relative Permittivity, 2 Myz 3 0		0.35	%	ASTM D570
Melt Flow Rate, 300°C/1.2 kgf 22 g/l m/m ASIM D1238 Bulk Density 1.2 kg/m² 150 183 Water Absorption, (23°C/saturated) 0.35 % 50 62.1 Melt Volume Rate, MVR at 300°C/1.2 kg 2 m³/10 min 50 1133 OPTICAL Light Transmission, 2.54 mm 88 8 9 90 % ASTM D1003 Refractive Index 0.8 % ASTM D1003 Refractive Index 1.586 ° 0.04 98 Refractive Index 1.586 ° 0.04 98 Refractive Index 1.586 ° 0.04 98 Refractive Index Bulk D164 0.0 0.0 0.0 0.0 Bulk D164 0.0 0.0 0.0 0.0 0.0 0.0 Belative Permittivity, 60 Hz 3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0<		0.5 – 0.7	%	SABIC method
1.2	Mold Shrinkage, flow, 3.2 mm ⁽³⁾	0.5 – 0.7	%	SABIC method
Water Absorption, (23°C/saturated) 0.35 % 150 62.1 Melt Volume Rate, MVR at 300°C/1.2 kg 21 om/10 min 50 1133 DFTICAL Uight Transmission, 2.54 mm 88 – 90 % ASTM D1003 Haze, 2.54 mm 40.8 % ASTM D103 Refractive Index 1.586 - ASTM D542 Refractive Index JEN 15 Q.cm ASTM D57 ELECTRICAL Uight Transmission, 2.54 mm ASTM D57 ASTM D150 LECTRICAL Uight Indicate of Marketin Mine 2.5 ASTM D57 William Assistivity ASTM D150 Relative Permittivity, 1 MHz 3 - ASTM D150 Dissipation Factor, 60 Hz 0.001 - ASTM D150 Dislepticity Strength, 1.6 mm EC 6023 C ASTM D150 Relative Permittivity, 60 Hz 3 - C C ASTM D150 Disleption Factor, 1 MHz 0 0 C C C <th< td=""><td>Melt Flow Rate, 300°C/1.2 kgf</td><td>22</td><td>g/10 min</td><td>ASTM D1238</td></th<>	Melt Flow Rate, 300°C/1.2 kgf	22	g/10 min	ASTM D1238
Melt Volume Rate, MVR at 300°C/1.2 kg 21 cm/l O min ISS 1133 OPTICAL Usght Transmission, 2.54 mm 88 – 90 % ASTM D1003 Refractive Index 1.586 2 ASTM D1003 Refractive Index 1.586 2 ASTM D542 Refractive Index 1.586 2 O.20 ASTM D552 ELECTICAL Volume Resistivity ASTM D159 ASTM D159 Relative Permittivity, 6.0 Hz 3 4 ASTM D150 Relative Permittivity, 1.0 Mtz 3 4 ASTM D150 Dissipation Factor, 6.0 Hz 0.01 4 ASTM D150 Dissipation Factor, 1.0 Mtz 2.0 ASTM D150 Volume Resistivity 1.6±15 Q.cm EC 60033 Dislepation Factor, 6.0 Hz 0.01 4.7mm EC 60243-1 Relative Permittivity, 6.0 Hz 3 4.0mm EC 60250 Dislipation Factor, 6.0 Hz 0.01 4.0mm EC 60250 Relative Permittivity, 1.0 Mtz 3 6.0mm EC 60250 Dislipation Facto	Bulk Density	1.2	kg/m³	ISO 1183
OPTICAL Light Transmission, 2.54 mm 88 – 90 % ASTM D1003 Haze, 2.54 mm 0.8 % ASTM D1003 Refractive Index 1.586 - ASTM D542 Refractive Index 1.586 - OS 489 ELECTRICAL W W ASTM D257 Dielectric Strength, 1.6 mm 27 K/lm ASTM D150 Relative Permittivity, 60 Hz 3 - ASTM D150 Relative Permittivity, 1 MHz 3 - ASTM D150 Dissipation Factor, 60 Hz 0.01 - ASTM D150 Dissipation Factor, 1 MHz 0.01 - ASTM D150 Volume Resistivity 4 X M M M EC 60243 Relative Permittivity, 1 MHz 3 - ASTM D150 C	Water Absorption, (23°C/saturated)	0.35	%	ISO 62-1
Light Transmission, 2.54 mm 88 – 90 % MSTM D1003 Haze, 2.54 mm <0.8 % OSTM D1003 Refractive lindex 1.586 <0.9 ASTM D542 Refractive lindex 1.586 <0.9 ASTM D542 EXECUTE/CIA Volume Resistivity 51.615 Q.m. ASTM D159 Dielectric Strength, 1.6 mm 27 W/m ASTM D150 Relative Permittivity, 50 Hz 3 ASTM D150 Dissipation Factor, 60 Hz 0.001 - ASTM D150 Dissipation Factor, 1 MHz 0.01 - ASTM D150 Dislectric Strength, 1.6 mm 2.1c F15 Q/m ASTM D150 Relative Permittivity, 60 Hz 3 ASTM D150 C0.032 Relative Permittivity, 60 Hz 3 Q/m EC 60503 Relative Permittivity, 1 MHz 3 C0.02 C0.02 Relative Permittivity, 50 Hz 6 C0.0250 C0.0250 Relative Permittivity, 1 MHz 6 C0.0250 C0.0250 Relative Permittivit	Melt Volume Rate, MVR at 300°C/1.2 kg	21	cm³/10 min	ISO 1133
Haze, 2.54 mm ASTM D103 Refractive Index 1.586 - ASTM D542 Refractive Index 1.586 - ASTM D542 Refractive Index 1.586 - - ASTM D542 ELECTRICA Wolume Resistivity ASTM D159 ASTM D150 Relative Permittivity, 1.6 mm 27 M/mm ASTM D150 Relative Permittivity, 6.0 Mz 3 - - ASTM D150 Relative Permittivity, 1.1 MHz 3 - - ASTM D150 Dissipation Factor, 6.0 Hz 0.01 - ASTM D150 Dissipation Factor, 1.1 MHz 0.01 - ASTM D150 Dissipation Factor, 1.0 Mrz 2.2 W/mm IEC 60023 Relative Permittivity, 6.0 Mz 3 - - EC 60250 Relative Permittivity, 1.0 Mrz 0.01 - - - - - - - - - - - - - - - - -	OPTICAL			
Refractive Index 1.586	Light Transmission, 2.54 mm	88 – 90	%	ASTM D1003
Refractive Index BECTRICA Volume Resistivity Selective Strength, 1.6 mm Pale Relative Permittivity, 50 Hz Belative Permittivity, 1 MHz Bolispiation Factor, 60 Hz Dislector, 1 MHz Nolume Resistivity ASTM D150 AS	Haze, 2.54 mm	<0.8	%	ASTM D1003
ELECTRICAL Volume Resistivity >1.E+15 Q.cm ASTM D257 Dielectric Strength, 1.6 mm 27 k//mm ASTM D149 Relative Permittivity, 60 Hz 3 - ASTM D150 Relative Permittivity, 1 MHz 3 - ASTM D150 Dissipation Factor, 60 Hz 0.001 - ASTM D150 Dissipation Factor, 1 MHz 0.1 - ASTM D150 Volume Resistivity 21.E+15 Q.cm IEC 60093 Relative Permittivity, 60 Hz 3 - M//mm IEC 60250 Relative Permittivity, 1 MHz 3 - M//mm IEC 60250 Relative Permittivity, 1 MHz 3 - M//mm IEC 60250 Relative Permittivity, 1 MHz 3 - - IEC 60250 Dissipation Factor, 60 Hz 0.001 - IEC 60250 Dissipation Factor, 60 Hz - - IEC 60250 Dissipation Factor, 60 Hz - - IEC 60250 Dissipation Factor, 1 MHz - - -	Refractive Index	1.586	-	ASTM D542
Volume Resistivity 51.E+15 Q.cm ASTM D257 Dielectric Strength, 1.6 mm 27 W/mm ASTM D149 Relative Permittivity, 60 Hz 3 - ASTM D150 Relative Permittivity, 1 MHz 3 - ASTM D150 Dissipation Factor, 60 Hz 0.01 - ASTM D150 Volume Resistivity 0.02 - ASTM D150 Volume Resistivity 0.02 - IEC 60093 Relative Permittivity, 1 Mthz 3 - - IEC 60250 Relative Permittivity, 1 Mthz 3 - - IEC 60250 Dissipation Factor, 60 Hz 0.001 - - 0.0250 ILEAME CHARACTERISTICS - - - 0.0250 INJURCETION MOLDING - - - - Invigor -	Refractive Index	1.586	-	ISO 489
Dielectric Strength, 1.6 mm 27 kV/mm ASTM D149 Relative Permittivity, 60 Hz 3 - ASTM D150 Relative Permittivity, 1 MHz 3 - ASTM D150 Dissipation Factor, 60 Hz 0.001 - ASTM D150 Dissipation Factor, 1 MHz 0.01 - ASTM D150 Volume Resistivity 2 - V/mm EC 60093 Dielectric Strength, 1.6 mm 27 V/mm EC 60250 Relative Permittivity, 1 MHz 3 - EC 60250 Dissipation Factor, 60 Hz 0.01 - EC 60250 Explain Factor, 1 MHz - - EC 60250 EXPLAID FLAME CHARACTERISTICS mm U.94 - Use Recognized, 94V-2 Flame Class Rating ⁽⁴⁾ 20 - - - - - - -	ELECTRICAL			
Relative Permittivity, 60 Hz 3 3	Volume Resistivity	>1.E+15	Ω.cm	ASTM D257
Relative Permittivity, 1 MHz Dissipation Factor, 60 Hz Olon Olon Olon Olon Olon Olon Olon Olon	Dielectric Strength, 1.6 mm	27	kV/mm	ASTM D149
Dissipation Factor, 60 Hz 0.001 - Common Month ASTM D150 Dissipation Factor, 1 MHz 0.01 - Common Month EC 60093 Volume Resistivity > 1.E+15 Ω.cm EC 60093 Belative Permittivity, 60 Hz 3 V//mm IEC 60250 Relative Permittivity, 1 MHz 3 - Common Month IEC 60250 Dissipation Factor, 60 Hz 0.01 - Common Month IEC 60250 Dissipation Factor, 1 MHz 0.01 - Common Month IEC 60250 FLAME CHARACTERISTICS TUREOUTH MOLDING U. 94 VIIII MICE TURN MOLDING VIII MICE TURN MOLDING <td>Relative Permittivity, 60 Hz</td> <td>3</td> <td>-</td> <td>ASTM D150</td>	Relative Permittivity, 60 Hz	3	-	ASTM D150
Dissipation Factor, 1 MHz 0.01 - Common Note ASTM D150 Volume Resistivity >1.E+15 Ω.cm Icc 60093 Dielectric Strength, 1.6 mm 27 K//mm Icc 60243-1 Relative Permittivity, 60 Hz 3 - Icc 60250 Relative Permittivity, 1 MHz 3 - - Icc 60250 Dissipation Factor, 60 Hz 0.001 - - - - - - - - - - - - - - - - - - <t< td=""><td>Relative Permittivity, 1 MHz</td><td>3</td><td>-</td><td>ASTM D150</td></t<>	Relative Permittivity, 1 MHz	3	-	ASTM D150
Volume Resistivity > 1.E+15 Accord	Dissipation Factor, 60 Hz	0.001	-	ASTM D150
Dielectric Strength, 1.6 mm 27 kV/mm IEC 60243-1 Relative Permittivity, 60 Hz 3 - IEC 60250 Relative Permittivity, 1 MHz 3 - IEC 60250 Dissipation Factor, 60 Hz 0.001 - IEC 60250 Dissipation Factor, 1 MHz 0.01 - - IEC 60250 LAME CHARACTERISTICS TUREOUTION MOLDING mm UL 94 Drying Temperature 120 °C - - Drying Time 2 - 4 Hrs -	Dissipation Factor, 1 MHz	0.01	-	ASTM D150
Relative Permittivity, 60 Hz Relative Permittivity, 1 MHz 3 0.001	Volume Resistivity	>1.E+15	Ω.cm	IEC 60093
Relative Permittivity, 1 MHz Dissipation Factor, 60 Hz Dissipation Factor, 1 MHz Dissipation Factor, 1 MHz Dissipation Factor, 1 MHz UL Recognized, 94V-2 Flame Class Rating (4) Disping Temperature Drying Temperature Drying Time 2 - 4 Maximum Moisture Content Maximum Moisture Content Drozel Temperature 280 - 300 Mozel Temperature 270 - 290 Model Temperature Pront - Zone 2 Temperature Recognized Temperature 270 - 290 Model Temperature Recognized Temperature Recognized Sear - Zone 1 Temperature Recognized Sear - Zone 1 Temperature Recognized Sear - Zone 2 Temperature Recogn	Dielectric Strength, 1.6 mm	27	kV/mm	IEC 60243-1
Dissipation Factor, 60 Hz 0.001 - IEC 60250 Dissipation Factor, 1 MHz 0.01 - IEC 60250 FLAME CHARACTERISTICS UL Recognized, 94V-2 Flame Class Rating (4) 0.75 mm UL 94 INJECTION MOLDING Drying Temperature 120 °C C Maximum Moisture Content 0.02 % L C Melt Temperature 280 – 300 °C L C Nozzle Temperature 280 – 300 °C L C Front - Zone 3 Temperature 280 – 300 °C L C Middle - Zone 2 Temperature 270 – 290 °C L C C Rear - Zone 1 Temperature 260 – 280 °C L C L C L C C Rear - Zone 1 Temperature C C C C C C C C C C C C C C C C C C C	Relative Permittivity, 60 Hz	3	-	IEC 60250
Dissipation Factor, 1 MHz FLAME CHARACTERISTICS UL Recognized, 94V-2 Flame Class Rating (4) Drying Temperature Drying Temperature Drying Time 4 2 - 4 Maximum Moisture Content Mozel Temperature 280 - 300 C Front - Zone 3 Temperature 270 - 290 Middle - Zone 2 Temperature 270 - 290 Middle - Zone 2 Temperature 270 - 290 Middle - Zone 2 Temperature 270 - 290 C Rear - Zone 1 Temperature 260 - 280 C Rozel Temperature 260 - 80 Rozel Temperature	Relative Permittivity, 1 MHz	3	-	IEC 60250
FLAME CHARACTERISTICS UL Recognized, 94V-2 Flame Class Rating (4) INJECTION MOLDING Drying Temperature 120 2-4 Maximum Moisture Content 0.02 84 Melt Temperature 280 - 300 80 C Front - Zone 3 Temperature 280 - 300 80 C Middle - Zone 2 Temperature 280 - 300 80 C Middle - Zone 2 Temperature 280 - 300 80 C Middle - Zone 2 Temperature 280 - 300 80 80 80 80 80 80 80 80 80	Dissipation Factor, 60 Hz	0.001	-	IEC 60250
NUL Recognized, 94V-2 Flame Class Rating (4) NUL PATRICTION MOLDING Drying Temperature Drying Time 120 2-4 Maximum Moisture Content 0.02 Melt Temperature 280 - 300 C Nozele Temperature 270 - 290 C Middle - Zone 3 Temperature 270 - 290 C Middle - Zone 2 Temperature 270 - 290 C Middle - Zone 2 Temperature 270 - 290 C Middle - Zone 3 Temperature 370 - 290 C Middle - Zone 3 Temperature 370 - 290 C Middle - Zone 2 Temperature 370 - 290 C Rear - Zone 1 Temperature 360 - 280 C C C C C C C C C C C C C	Dissipation Factor, 1 MHz	0.01	-	IEC 60250
INJECTION MOLDINGDrying Temperature120°CDrying Time2 – 4HrsMaximum Moisture Content0.02%Melt Temperature280 – 300°CNozzle Temperature270 – 290°CFront - Zone 3 Temperature280 – 300°CMiddle - Zone 2 Temperature270 – 290°CRear - Zone 1 Temperature260 – 280°CHopper Temperature60 – 80°C	FLAME CHARACTERISTICS			
Drying Temperature 120 °C Drying Time 2 – 4 Hrs Maximum Moisture Content 0.02 % Melt Temperature 280 – 300 °C Nozzle Temperature 270 – 290 °C Front - Zone 3 Temperature 280 – 300 °C Middle - Zone 2 Temperature 270 – 290 °C Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	UL Recognized, 94V-2 Flame Class Rating (4)	0.75	mm	UL 94
Drying Time 2 – 4 Hrs Maximum Moisture Content 0.02 % Melt Temperature 280 – 300 °C Nozzle Temperature 270 – 290 °C Front - Zone 3 Temperature 280 – 300 °C Middle - Zone 2 Temperature 270 – 290 °C Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	INJECTION MOLDING			
Maximum Moisture Content 0.02 % Melt Temperature 280 – 300 °C Nozzle Temperature 270 – 290 °C Front - Zone 3 Temperature 280 – 300 °C Middle - Zone 2 Temperature 270 – 290 °C Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	Drying Temperature	120	°C	
Melt Temperature 280 – 300 °C Nozzle Temperature 270 – 290 °C Front - Zone 3 Temperature 280 – 300 °C Middle - Zone 2 Temperature 270 – 290 °C Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	Drying Time	2 – 4	Hrs	
Nozzle Temperature 270 – 290 °C Front - Zone 3 Temperature 280 – 300 °C Middle - Zone 2 Temperature 270 – 290 °C Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	Maximum Moisture Content	0.02	%	
Front - Zone 3 Temperature 280 – 300 °C Middle - Zone 2 Temperature 270 – 290 °C Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	Melt Temperature	280 – 300		
Middle - Zone 2 Temperature 270 – 290 °C Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	Nozzle Temperature			
Rear - Zone 1 Temperature 260 – 280 °C Hopper Temperature 60 – 80 °C	Front - Zone 3 Temperature	280 – 300		
Hopper Temperature 60 − 80 °C	Middle - Zone 2 Temperature	270 – 290		
	Rear - Zone 1 Temperature			
Mold Temperature 80 – 100 °C	Hopper Temperature	60 – 80		
	Mold Temperature	80 – 100	°C	



- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (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.
- (4) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

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