

NORYL[™] RESIN PX1630

REGION EUROPE

DESCRIPTION

NORYL PX1630 Polyphenylene Oxide (PPO) + Polystyrene (PS) resin is a 30 % Glass Reinforced, injection moldable grade with improved hydrolytic stability; this grade has been developed for water management applications. NORYL PX1630 has been certified for potable water applications up to 85C in Europe and North America in limited colours.

TYPICAL PROPERTY VALUES

Revision 20181012

MECHANICA Tensile Stress, break, 5 mm/min 106 MPa 105 527 Tensile Stress, break, 5 mm/min 2 8 105 527 Tensile Modulus, 1 mm/min 8100 MPa 105 527 Flexural Modulus, 2 mm/min 70 MPa 105 178 Taber Abrasion, CS-17, 1 kg 70 MPa 105 0239-1 Harderss, H358/30 10 MPa 105 0239-1 HAMACH *** Taber Abrasion, CS-17, 1 kg 70 MPa 105 0239-1 Harderss, H358/30 10 MPa 105 0239-1 HAMACH *** Taber Abrasion, CS-17, 1 kg 70 MPa 105 0239-1 HAMACH *** Taber Abrasion, CS-17, 1 kg 70 MPa 105 0239-1 HAMACH *** Taber Abrasion, CS-17, 1 kg 70 MPa 105 0239-1 HAMACH *** Taber Abrasion, CS-17, 1 kg 70 MPa 105 0630-1 HAMACH *** Taber Abrasion Abrasion, CS-17, 1 kg 41 MPa 105 180/1 Book Instruction Abrasion Abrasion, CS-10, 1 kg 20 100 113 180-1 100 113 180-1 Book Instruction Abrasion Abrasion Abrasion, CS-10, 1	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Strain, break. 5 mm/min 2 % \$0527 Tensile Modulus, 1 mm/min 8100 Ma \$0527 Flexural Modulus, 2 mm/min 700 Ma \$05178 Telesural Modulus, 2 mm/min 7050 Mm \$05178 Taber Abrasion, CS-17, 1kg 70 mg/1000cy \$48Cmethod Hardeness, H358/30 30 Wa \$20.393-1 MIMACT II W \$10 \$60 Multiaxial Impact 6 \$1 \$50.603 Rod Impact, unnotched 80°10°4 +23°C 34 \$1/m² \$50.180/10 Rod Impact, unnotched 80°10°4 +23°C 30 \$1/m² \$50.180/10 Rod Impact, notched 80°10°4 +23°C 30 \$1/m² \$50.180/10 Rod Impact, notched 80°10°4 +23°C 31 \$1/m² \$50.180/10 Rod Impact, notched 80°10°4 +23°C 32 \$1.5 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0	MECHANICAL			
Fersile Modulus, 1 mm/min 8100 MPa ISO 527 Flexural Stress, break, 2 mm/min 170 MPa ISO 178 Flexural Modulus, 2 mm/min 7050 MPa ISO 178 Taber Abrasion, CS-17, 1kg 70 mg/l 000xy Salk Cmethod Hardness, 1358/30 130 MPa ISO 2039-1 Multiadal Impact Us ISO 6603 Rood Impact, unnotched 80*10*4+23**C 34 Is/m² ISO 180/10 Rood Impact, unnotched 80*10*4-30**C 30 Is/m² ISO 180/10 Rood Impact, unnotched 80*10*4-30**C 11 I/m² ISO 180/10 Rood Impact, notched 80*10*4-23**C 12 I/m² ISO 180/10 Rood Impact, notched 80*10*4-23**C 12 I/m² ISO 180/10 Rood Impact, notched 80*10*4-23**C 2 IX ISO 180/10	Tensile Stress, break, 5 mm/min	106	MPa	ISO 527
Flexural Stress, break, 2 mm/min 170 MPa ISO 178 Flexural Modulus, 2 mm/min 7050 MPa ISO 178 Taber Abrasien, CS-17, 1 kg 70 mg/1000xy SABIC method Hardness, H358/30 130 MPa SABIC method Multiaxial Impact 5 15 SO 6603 Robust Impact, unnotched 80°10°4+23°C 34 MIm² SO 1801/U Rod Impact, unnotched 80°10°4+23°C 11 M/m² SO 1801/U Rod Impact, unnotched 80°10°4+23°C 11 M/m² SO 1801/U Rod Impact, unotched 80°10°4+23°C 11 M/m² SO 1801/U Rod Impact, unotched 80°10°4+23°C 11 M/m² SO 1801/U Rod Impact, unotched 80°10°4+23°C 11 M/m² SO 1801/U Ball Pressure Test, 12°C 2 5 Y°C SO 1801/U Ball Mestade Mort Glow 2 5 5 5 6 6 6 9 6 9 6 9 6 9 9 6 9 6 9	Tensile Strain, break, 5 mm/min	2	%	ISO 527
Flexural Modulus, 2 mm/min 7050 MPa SO 178 Taber Abrasion, CS-17, 1 kg 70 mg/1000cy SABIC method Hardness, H358/30 130 MPa 50 2039-1 MMACT ⁽¹⁾ V V Multiakal Impact 6 J S6 603 Izod Impact, unnotched 80°10′4 +23°C 34 kl/m² S0 180/10 Izod Impact, unnotched 80°10′4 +23°C 11 kl/m² S0 180/10 Izod Impact, notched 80°10′4 +23°C 11 kl/m² S0 180/10 Izod Impact, notched 80°10′4 +23°C 11 kl/m² S0 180/10 Izod Impact, notched 80°10′4 +23°C 11 kl/m² S0 180/10 Izod Impact, notched 80°10′4 +23°C 11 kl/m² S0 180/10 Izod Mapact, notched 80°10′4 +23°C 2 11 c S0 180/10 Izod Mapact, notched 80°10′4 +23°C 2 11 c S0 180/10 Izod Mapact, notched 80°10′4 +23°C 2 8 S0 180/10 Izod Impact, notched 80°10′4 +23°C 8 S0 180/10 Izod Hamila	Tensile Modulus, 1 mm/min	8100	MPa	ISO 527
Taber Abrasion. Cs.17, 1kg 70 mg/100cy ABIC method Hardness, H358/30 130 MPa 50 2039-1 IMPACT ¹⁰ V V Waltasal Impact, unnotched 80°10°4 +23°C 34 I/m² ISO 6603 Izod Impact, unnotched 80°10°4 +23°C 34 I/m² ISO 180/1U Izod Impact, unnotched 80°10°4 +23°C 11 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 +23°C 11 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 +23°C 11 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 +23°C 11 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 -23°C 11 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 -23°C 11 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 -23°C 11 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 -23°C 12 I/m² ISO 180/1A Izod Impact, unotched 80°10°4 -23°C 12 IX IX Izod Impact, unotched 80°10°4 -23°C 80.5180/1A IX <	Flexural Stress, break, 2 mm/min	170	MPa	ISO 178
Hardness, H358 J30 130 Me9a 150 2039-1 IMPACT (¹) Multiaxial Impact 6 J 150 603 Izod Impact, unnotched 80*10*4 +23*°C 34 I/I/m² 150 180/10 Izod Impact, unnotched 80*10*4 +23*°C 11 I/I/m² 150 180/10 Izod Impact, notched 80*10*4 +30*°C 11 I/I/m² 150 180/10 Izod Impact, notched 80*10*4 +30*°C 11 I/I/m² 150 180/10 Izod Impact, notched 80*10*4 +30*°C 11 I/I/m² 150 180/10 Izod Impact, notched 80*10*4 +30*°C 11 I/I/m² 150 180/10 Izod Impact, notched 80*10*4 +30*°C 11 I/I/m² 150 180/10 Izod Impact, notched 80*10*4 +30*°C 15 I/I/m² 150 180/10 Izod Impact, notched 80*10*4 +30*°C 15 1/I/m² 150 11359-2 Izod Impact, notched 80*10*4 +30*°C 15 1/I/m² 150 11359-2 Izod Impact, notched 80*10*4 +30*°C 15 1/I/m² 150 11359-2 Izod Impact, notched 80*10*4 +30*°C 15 15 17 15 15	Flexural Modulus, 2 mm/min	7050	MPa	ISO 178
Multiaxial Impact 6 J SO 6603 izod Impact, unnotched 80°10°4 +23°C 34 kJ/m² ISO 180/1U izod Impact, unnotched 80°10°4 +33°C 30 kJ/m² ISO 180/1U izod Impact, notched 80°10°4 +33°C 11 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +33°C 10 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +30°C 10 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +30°C 10 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +30°C 10 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +30°C 10 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +30°C 10 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +30°C 10 kJ/m² ISO 180/1A izod Impact, notched 80°10°4 +30°C 10	Taber Abrasion, CS-17, 1 kg	70	mg/1000cy	SABIC method
Multiaxial Impact 6 J ISO 6603 Izod Impact, unnotched 80°10°4+23°C 34 kJ/m² ISO 180/1U Izod Impact, unnotched 80°10°4+23°C 30 kJ/m² ISO 180/1U Izod Impact, notched 80°10°4+23°C 11 kJ/m² ISO 180/1A Izod Impact, notched 80°10°4+23°C 11 kJ/m² ISO 180/1A Izod Impact, notched 80°10°4+23°C 10 kJ/m² ISO 180/1A Izod Impact, notched 80°10°4+23°C 11 KJ/m² ISO 180/1A Izod Impact, notched 80°10°4+23°C 11 KJ/m² ISO 180/1A Izod Impact, notched 80°10°4+23°C 12 ISO 180/1A ISO 180/1A Izod Impact, notched 80°10°4+23°C 12 ISO 180/1A ISO 180/1A Izod Impact, notched 80°10°4+23°C 15 11°C ISO 11359-2 ISO 11359-2 IZED 40°C 10°C ISO 306 ISO 306 ISO 306 ISO 306 Vicat Softening Temp, Rate 8/50 149 ° ° C ISO 306 ISO 306 ISO 306 ISO 306 ISO 306 ISO 306	Hardness, H358/30	130	MPa	ISO 2039-1
Izod Impact, unnotched 80°10°4 +23°C 34 kil/m² SO 180/1U Izod Impact, unnotched 80°10°4 -30°C 30 kil/m² ISO 180/1A Izod Impact, notched 80°10°4 -23°C 11 kl/m² ISO 180/1A Izod Impact, notched 80°10°4 -30°C 10 kl/m² ISO 180/1A THERMAL CTE, 40°C to 40°C, flow 2.E.5 1/°C ISO 11359-2 CTE, 40°C to 40°C, flow 7.E.5 1/°C ISO 306 CTE, 40°C to 40°C, flow 7.E.5 1/°C ISO 305-2 SBBI Pressure Test, 125°C +/-2°C PASSES °C ISO 306 Vicat Softening Temp, Rate 8/50 149 °C ISO 306 Vicat Softening Temp, Rate B/120 155 °C ISO 306 Vicat Softening Temp, Rate B/120 149 °C ISO 306 Vicat Softening Temp, Rate B/120 155 °C ISO 306 MDIJ / Jan. 1.8 MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be MOIS / Jan. 1.8 MPa Edgew 120°10°4 sp=100mm	IMPACT (1)			
Izod Impact, unnotched 80°10°4 -30°C 30 k1/m² ISO 180/10 Izod Impact, notched 80°10°4 -23°C 11 k1/m² ISO 180/1A Izod Impact, notched 80°10°4 -30°C 10 k1/m² ISO 180/1A Izod Impact, notched 80°10°4 -30°C 10 k1/m² ISO 180/1A Izod Impact, notched 80°10°4 -30°C 10 k1/m² ISO 180/1A Itod Impact, notched 80°10°4 -30°C 10 ISO 180/1A Itod Impact, notched 80°10°4 -30°C 10 ISO 180/1A Itod Impact, notched 80°10°4 -30°C 10 ISO 180/1A Itod Impact, notched 80°10°4 -30°C ISO 1359-2 ISO 180/14 Itod 10°C -10°C -10°C 10°C ISO 11359-2 ISO 180/14 Itod 10°C -10°C -10°C -10°C 10 PC ISO 306 ISO 306 ISO 306 Vicat Softening Temp, Rate 8/120 149 °C ISO 306 ISO 306	Multiaxial Impact	6	J	ISO 6603
Rod Impact, notched 80°10°4 +23°C 11 RJ/m² ISO 180/1A Izod Impact, notched 80°10°4 -30°C 10 RJ/m² ISO 180/1A THERMAL CTE, -40°C to 40°C, flow 2.E5 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 7.E5 1/°C ISO 11359-2 Ball Pressure Test, 125°C+/- 2°C PASSES - IEC 60695-10-2 Wicat Softening Temp, Rate A/50 155 °C ISO 306 Vicat Softening Temp, Rate B/150 149 °C ISO 306 Wicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm 1.29 SMID 792 Mold Shrinkage, flow, 3.2 mm 0.1 – 0.3 % SABIC method Water Absorption, (23°C/sat) 0.2 – 0.5 % SABIC method Water Absorption (23°C/sat) 0.06 % SO 62 Moisture Absorption (23°C/sat) <	Izod Impact, unnotched 80*10*4 +23°C	34	kJ/m²	ISO 180/1U
Izod Impact, notched 80°10°4-30°C 10 kI/m² ISO 180/1A THERMAL CTE, -40°C to 40°C, flow 2.E-5 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 7.E-5 1/°C ISO 11359-2 Ball Pressure Test, 125°C +/-2°C PASSES - IEC 60695-10-2 Vicat Softening Temp, Rate A/50 155 °C ISO 306 Vicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 306 HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 1.29 ~ ASTM D 792 Mold Shrinkage, flow, 3.2 mm 2.29 SABIC method Mold Shrinkage, flow, 3.2 mm 0.2-0.5 % ASBIC method Water Absorption, (23°C/sat) 0.2 % ISO 62 Density 1.3 (m²) ISO 62 Mold Shrinkage, MIOw, 3.2 mm (m²) (m	Izod Impact, unnotched 80*10*4 -30°C	30	kJ/m²	ISO 180/1U
THERMAL CTE, 40°C to 40°C, flow 2.E5 1/°C ISO 11359-2 CTE, 40°C to 40°C, flow 7.E5 1/°C ISO 11359-2 Ball Pressure Test, 125°C +/- 2°C PASSES - IEC 60695-10-2 Vicat Softening Temp, Rate A/50 155 °C ISO 306 Vicat Softening Temp, Rate B/50 149 °C ISO 306 Vicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm 140 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm 140 °C ISO 75/Be PHYSICAL Specific Gravity 1.29 ASTM D 792 Mold Shrinkage, flow, 3.2 mm 0.1 – 0.3 % SABIC method Water Absorption, (23°C/sat) 0.2 % SABIC method Water Absorption (23°C/sat) 1.3 g/cm³ ISO 1183 Moisture Absorption (23°C/50% RH) 0.06 % ISO 10 Moisture Absorption (23°C/50% RH)	Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
CTE, 40°C to 40°C, flow 2.E5 1/°C ISO 11359-2 CTE, 40°C to 40°C, xflow 7.E5 1/°C ISO 11359-2 Ball Pressure Test, 125°C +/-2°C PASSES - EC 60695-10-2 Vicat Softening Temp, Rate A/50 155 °C ISO 306 Vicat Softening Temp, Rate B/50 149 °C ISO 306 Wicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 140 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 140 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 140 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 10 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 10 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 1.29 "ATM D 792 ISO 75/Be Mold Shrinkage, flow, 3.2 mm 0.2 - 0.5 % SABIC method ISO 62 Water Absorption (23°C/sox H)<	Izod Impact, notched 80*10*4 -30°C	10	kJ/m²	ISO 180/1A
CTE, 40°C to 40°C, xflow 7.E5 1/°C ISO 11359-2 Ball Pressure Test, 125°C +/- 2°C PASSES - EC 60695-10-2 Vicat Softening Temp, Rate A/50 155 °C ISO 306 Vicat Softening Temp, Rate B/50 149 °C ISO 306 Vicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm 149 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 149 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 149 °C ISO 75/Be HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 149 °C ASTM D 792 Whold Shrinkage, flow, 3.2 mm 1.29 SAIC MED SAIC MED Mold Shrinkage, flow, 3.2 mm 0.2 - 0.5 % SAIC method Water Absorption, (23°C/sat) 1.3 g/cm³ ISO 1133 Moisture Absorption (23°C / 50% RH) 0.06 m³/10 min ISO 1133 ELECTRICAL Umarch Defende	THERMAL			
Ball Pressure Test, 125°C + J- 2°C PASSES - IEC 60695-10-2 Vicat Softening Temp, Rate A J50 155 °C ISO 306 Vicat Softening Temp, Rate B J50 149 °C ISO 306 Vicat Softening Temp, Rate B J120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm 140 °C ISO 75/Be PHYSICAL ** ** YE Specific Gravity 1.29 - ASTM D 792 Mold Shrinkage, sflow, 3.2 mm 0.1 - 0.3 % SABIC method Water Absorption, (23°C/sat) 0.2 % SABIC method Density 1.3 y/cm³ ISO 62 Molt Volume Rate, MVR at 300°C/10.0 kg 16 m³/l 0 min ISO 1133 ELECTRICAL LECTRICAL Ohm-cm IEC 60093	CTE, -40°C to 40°C, flow	2.E-5	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/50 155 °C ISO 306 Vicat Softening Temp, Rate B/50 149 °C ISO 306 Vicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm 140 °C ISO 75/Be PHYSICAL *** *** ASTM D 792 Mold Shrinkage, flow, 3.2 mm 1.29 ** ASBIC method Mold Shrinkage, xflow, 3.2 mm 0.2 - 0.5 \$ SABIC method Water Absorption, (23°C/sat) 0.2 \$ ISO 62 Density 1.3 g/cm³ ISO 1183 Moisture Absorption (23°C / 50% RH) 0.06 \$ ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm²/10 min ISO 1133 ELECTRICAL Volume Resistivity IE+15 Ohm-cm EEC 60093	CTE, -40°C to 40°C, xflow	7.E-5	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50 149 °C ISO 306 Vicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm 140 °C ISO 75/Be PHYSICAL *** *** ASTM D 792 Mold Shrinkage, flow, 3.2 mm 0.1 – 0.3 % SABIC method Mold Shrinkage, xflow, 3.2 mm 0.2 – 0.5 % SABIC method Water Absorption, (23°C/sat) 0.2 % ISO 62 Density I.3 g/cm³ ISO 1183 Moisture Absorption (23°C / 50% RH) 0.06 % ISO 1133 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity IEC 60093	Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/120 158 °C ISO 306 HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm 140 °C ISO 75/Ae PHYSICAL Specific Gravity 1.29 - ASTM D 792 Mold Shrinkage, flow, 3.2 mm 0.1 – 0.3 % SABIC method Water Absorption, (23°C/sat) 0.2 – 0.5 % SABIC method Density 1.3 g/cm³ ISO 62 Moisture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity 1.£±15 Ohm-cm IEC 60093	Vicat Softening Temp, Rate A/50	155	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120°10°4 sp=100mm 145 °C ISO 75/Be HDT/Ae, 1.8 MPa Edgew 120°10°4 sp=100mm 140 °C ISO 75/Ae PHYSICAL Specific Gravity 1.29 · ASTM D 792 Mold Shrinkage, flow, 3.2 mm 0.1 − 0.3 % SABIC method Mold Shrinkage, xflow, 3.2 mm 0.2 − 0.5 % SABIC method Water Absorption, (23°C/sat) 0.2 % SABIC method Density 1.3 % SO 62 Density 1.3 % SO 62 Melt Volume Rate, MVR at 300°C/10.0 kg ISO 62 ELECTRICAL Volume Resistivity 1.E+15 Ohm-cm IEC 60093	Vicat Softening Temp, Rate B/50	149	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm 140 °C ISO 75/Ae PHYSICAL Specific Gravity 1.29 - ASTM D 792 Mold Shrinkage, flow, 3.2 mm 0.1 − 0.3 % SABIC method Water Absorption, (23°C/sat) 0.2 % SABIC method Density 1.3 g/cm³ ISO 62 Moisture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity 1.E+15 Ohm-cm IEC 60093	Vicat Softening Temp, Rate B/120	158	°C	ISO 306
PHYSICAL Specific Gravity 1.29 - ASTM D 792 Mold Shrinkage, flow, 3.2 mm 0.1 – 0.3 % SABIC method Water Absorption, (23°C/sat) 0.2 – 0.5 % SABIC method Density 1.3 g/cm³ ISO 62 Molsture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity I.E+15 Ohm-cm IEC 60093	HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	145	°C	ISO 75/Be
Specific Gravity 1.29 - ASTM D 792 Mold Shrinkage, flow, 3.2 mm 0.1 – 0.3 % SABIC method Mold Shrinkage, xflow, 3.2 mm 0.2 – 0.5 % SABIC method Water Absorption, (23°C/sat) 0.2 % ISO 62 Density 1.3 g/cm³ ISO 1183 Moisture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity I.E+15 Ohm-cm IEC 60093	HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	140	°C	ISO 75/Ae
Mold Shrinkage, flow, 3.2 mm 0.1 – 0.3 % SABIC method Mold Shrinkage, xflow, 3.2 mm 0.2 – 0.5 % SABIC method Water Absorption, (23°C/sat) 0.2 % ISO 62 Density ISO 1183 ISO 62 Moisture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity 1.E+15 Ohm-cm IEC 60093	PHYSICAL			
Mold Shrinkage, xflow, 3.2 mm 0.2 – 0.5 % SABIC method Water Absorption, (23°C/sat) 0.2 % 150 62 Density 1.3 g/cm³ ISO 1183 Moisture Absorption (23°C / 50% RH) 0.06 % 150 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity 1.E+15 Ohm-cm IEC 60093	Specific Gravity	1.29	-	ASTM D 792
Water Absorption, (23°C/sat) 0.2 % ISO 62 Density 1.3 g/cm³ ISO 1183 Moisture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity IEC 60093	Mold Shrinkage, flow, 3.2 mm	0.1 – 0.3	%	SABIC method
Density 1.3 g/cm³ ISO 1183 Moisture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity 1.E+15 Ohm-cm IEC 60093	Mold Shrinkage, xflow, 3.2 mm	0.2 – 0.5	%	SABIC method
Moisture Absorption (23°C / 50% RH) 0.06 % ISO 62 Melt Volume Rate, MVR at 300°C/10.0 kg 16 cm³/10 min ISO 1133 ELECTRICAL Volume Resistivity 1.E+15 Ohm-cm IEC 60093	Water Absorption, (23°C/sat)	0.2	%	ISO 62
Melt Volume Rate, MVR at 300°C/10.0 kg16cm³/10 minISO 1133ELECTRICALVolume Resistivity1.E+15Ohm-cmIEC 60093	Density	1.3	g/cm³	ISO 1183
ELECTRICAL Volume Resistivity 1.E+15 Ohm-cm IEC 60093	Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
Volume Resistivity 1.E+15 Ohm-cm IEC 60093	Melt Volume Rate, MVR at 300°C/10.0 kg	16	cm³/10 min	ISO 1133
•	ELECTRICAL			
Surface Resistivity, ROA >1.E+15 Ohm IEC 60093	Volume Resistivity	1.E+15	Ohm-cm	IEC 60093
	Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dielectric Strength, in oil, 3.2 mm	18	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	2.9	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.0006	-	IEC 60250
Dissipation Factor, 1 MHz	0.001	-	IEC 60250
Relative Permittivity, 50/60 Hz	2.9	-	IEC 60250
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
Oxygen Index (LOI)	26	%	ISO 4589
Glow Wire Flammability Index 750°C, passes at	3	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 3.0 mm	750	°C	IEC 60695-2-13
INJECTION MOLDING			
Drying Temperature	100 – 120	°C	
Drying Time	2 – 4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	280 – 300	°C	
Nozzle Temperature	280 – 300	°C	
Front - Zone 3 Temperature	290 – 310	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	250 – 270	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	80 – 120	°C	

⁽¹⁾ Multiaxial Impact tested at 23°C

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