

**Ryton® R-4-244BL**

PPS-GF40

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.0021	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.0073	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	15600	MPa	ISO 527
Tensile Strength	197	MPa	ISO 527
Strain at break	1.8	%	ISO 527
Flexural modulus, 23°C	14900	MPa	ISO 178
Flexural strength	273	MPa	ISO 178
Izod impact strength, +23°C	40	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C	10	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Compressive Strength	164	MPa	ASTM D 695
Rockwell Hardness	R 123	-	ASTM D 785

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting temperature, 10°C/min	285	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	270	°C	ISO 75-1/-2
<b>ASTM Data</b>			
UL 94 Flame rating	V-0	-	UL 94
Thickness tested	0.75	mm	-
Coefficient of Thermal Expansion, MD	16	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	52	E-6/K	ASTM D 696
Thermal Conductivity, solid state	0.28	W/(m K)	ASTM C 177

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Comparative tracking index	150	-	IEC 60112
<b>ASTM Data</b>			
Dielectric Strength, Short Time	440	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	0.001	-	ASTM D 150
Dielectric Constant, 1 MHz	3.95	-	ASTM D 150
Surface Resistivity	5.2E15	Ohm	ASTM D 257
Volume Resistivity	1.4E16	Ohm*cm	ASTM D 257
Arc Resistance	133	s	ASTM D 495

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.007	%	ASTM D 570
Density	1670	kg/m <sup>3</sup>	ASTM D 792

**Characteristics****Processing**

Injection Molding

**Delivery form**

Pellets, Black

**Certifications**

Food contact, Food approval FDA 21 CFR, Drinking water contact, Drinking water contact KTW, Drinking water contact NSF 61, RoHS compliant

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa