

Property	Test Condition	Test Method ISO	Units	Recycling	
				Recycling20%, GF33%	
				EA1R21G33	
				>PA6-GF33<	
				Dry	
Physical property					
Water Absorption	24hrs. in 23°C water	ISO62	%		1
Water Absorption	23°C in water	ISO62	%		-
Density	23°C	ISO1183	kg/m ³		1380
Mechanical property					
Tensile strength	-40°C	ISO527-1,2	MPa		-
Tensile strength	23°C	ISO527-1,2	MPa		192
Tensile strength	80°C	ISO527-1,2	MPa		-
Elongation at Break	-40°C	ISO527-1,2	%		-
Elongation at Break	23°C	ISO527-1,2	%		3.8
Elongation at Break	80°C	ISO527-1,2	%		-
Flexural Strength	-40°C	ISO178	MPa		-
Flexural Strength	23°C	ISO178	MPa		266
Flexural Strength	80°C	ISO178	MPa		-
Flexural Modulus	-40°C	ISO178	GPa		-
Flexural Modulus	23°C	ISO178	GPa		8.9
Flexural Modulus	80°C	ISO178	GPa		-
Compressive Strength	-40°C	ISO604	MPa		-
Compressive Strength	23°C	ISO604	MPa		-
Compressive Strength	80°C	ISO604	MPa		-
Coefficient of friction (Without lubrication)	Vs metal	Suzuki Method	-		-
Shear Strength	23°C	ASTM D732	MPa		-
Rockwell Hardness	23°C	ISO2039-2	R Scale		-
Rockwell Hardness	80°C	ISO2039-2	R Scale		-
Taper Abrasion		ISO9352	mg/1000times		-
Charpy Impact Strength (V-notched)	-40°C	ISO179	kJ/m ²		-
Charpy Impact Strength (V-notched)	23°C	ISO179	kJ/m ²		18.6
Charpy Impact Strength (Unnotched)	-40°C	ISO179	kJ/m ²		-
Charpy Impact Strength (Unnotched)	23°C	ISO179	kJ/m ²		-
Heat property					
Melting Point		DSC Method	°C		225
Specific Heat		-	J/g · °C		1.6
Thermal Conductivity		-	W/m · °C		0.4
Coef of Linear Thermal Expansion		ISO11359-2	×10 ⁻⁵ /°C		2~3
Heat Deflection Temp Low Load	0.45MPa	ISO75-1,2	°C		224
Heat Deflection Temp High Load	1.80MPa	ISO75-1,2	°C		215
Flammability		UL94	rank/thickness m mt		HB
Electrical property					
Volume Resistivity		IEC60093	Ω · m		-
Dielectric Strength		IEC60243-1	MV/m		-
Dielectric Constant	23°C, 60%RH, 50Hz	IEC 60250	-		-
Dielectric Constant	23°C, 60%RH, 1KHz	IEC 60250	-		-
Dielectric Constant	23°C, 60%RH, 1MHz	IEC 60250	-		-
Dissipation Factor	23°C, 60%RH, 50Hz	IEC 60250	-		-
Dissipation Factor	23°C, 60%RH, 1KHz	IEC 60250	-		-
Dissipation Factor	23°C, 60%RH, 1MHz	IEC 60250	-		-
Molding property					
Mold shrinkage(Machine Direction)	80×80×3mmt	Toray Method	%		0.2~0.4
Mold shrinkage(Transverse Direction)	80×80×3mmt	Toray Method	%		0.5~0.8

These values are typical data for this product under specific test conditions and not intended for use as limiting specifications.

COPYRIGHT © TORAY INDUSTRIES,INC

