

# Z-215-G1

- **Product Summary: Z-215-G1 is a 15% glass fiber reinforced super tough PPS compound with ultra-high viscosity and expansibility for blow molding.**
- **Color: Black**

**Engineering Properties of Z-215-G1**

Properties	Test Method	Unit	Z-215-G1
General Information			GF15% Blow molding
<b>Physical</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.39
Water absorption, 23°C/24Hrs.	ISO 62	%	0.03
Mold shrinkage <sup>a</sup>	ISO 294-4	%	0.8/0.9
<b>Mechanical</b>			
Tensile strength	ISO 527-1,2	MPa	100
Tensile modulus	ISO 527-1,2	GPa	6.0
Tensile strain at break	ISO 527-1,2	%	3.0
Flexural strength	ISO 178	MPa	170
Flexural modulus	ISO 178	GPa	5.5
Flexural strain at break	ISO 178	%	4.5
Charpy impact strength, notched	ISO 179/1eA	kJ/m <sup>2</sup>	17
unnotched	ISO 179/1eU	kJ/m <sup>2</sup>	60
Co-eff. of friction <sup>b</sup> , static/dynamic	-	-	-
<b>Thermal</b>			
Heat deflection temperature, 1.80MPa	ISO 75-1,2	°C	165
Co-eff. of linear thermal expansion <sup>a</sup> , -50~50 °C	ISO 11359-2	x 10 <sup>-5</sup> /K	2.5/7.5
Co-eff. of linear thermal expansion <sup>a</sup> , 100~200 °C	ISO 11359-2	x 10 <sup>-5</sup> /K	2.0/15.0
Flammability <sup>c</sup> /thickness (mm)	UL-94	-	-
<b>Electrical</b>			
Dielectric strength, t=1.0mm	IEC 60243-1	kV/mm	28
Dielectric constant, 1MHz	IEC 60250	-	4
Dissipation factor, 1MHz	IEC 60250	-	0.007
Comparative Tracking Index (CTI)	IEC 60112	V	200
Volume resistivity	IEC 60093	Ω·cm	10 <sup>16</sup>
<b>Molding Condition</b>			
Cylinder temperature	-	°C	290-320
Mold temperature	-	°C	130-150

a: Flow direction/Transverse direction

b: P=150kPa, V=0.3m/s, PPS vs. carbon steel

c: UL file No. E53829