

## Technical Data Sheet

**Polyflam RABS 90000 UV5 CA GRY69780**

Acrylonitrile Butadiene Styrene

**Product Description**

Flame retardant ABS grade without PBDE, higher thermal stability and permanent antistatic properties

**Processing Method** Injection Molding**Attribute** Good Processability; Good Thermal Stability; Non Blooming**Additive** Flame Retardant

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Volume Flow Rate, (220 °C/10.0 kg)	44	cm <sup>3</sup> /10 min	ISO 1133
Density, (Method A)	1.36	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	30.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	5.0	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1550	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.3	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	2.5	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	52	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Pressure Test, (90 °C)	Pass		IEC 60695-10-2
<b>Thermal</b>			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	79.0	°C	ISO 306
(A (10N), 50 °C/h)	101	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	81.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	68.0	°C	ISO 75-2/A
RTI Elec, (3.0 mm)	60.0	°C	UL 746B
RTI Imp, (3.0 mm)	60.0	°C	UL 746B
RTI Str, (3.0 mm)	60.0	°C	UL 746B
<b>Electrical</b>			
Comparative Tracking Index (CTI)	325	V	IEC 60112

Surface Resistivity	2700000000 0	ohm	IEC 60093
<b>Flammable</b>			
Burning Rate			
(2.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(2.00 mm, Self-Extinguishing)	0.0	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	650	°C	IEC 60695-2-13
(3.0 mm)	650	°C	IEC 60695-2-13
Oxygen Index	27	%	ISO 4589-2
<b>UL Information</b>			
Flame Rating, (3.0 mm)	V-1		UL 94
Flammability Classification, (3.0 mm)	V-1		IEC 60695-11-10, -20
UL File Number	E86615- 103906164		

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
Drying Time	2.0 to 4.0	hr
Drying Temperature	70 to 80	°C
Screw Speed	<300	mm/sec
Processing (Melt) Temp	220 to 240	°C
Injection Rate	Slow- Moderate	
Back Pressure	5.00 to 10.0	MPa
Mold Temperature	40 to 60	°C