

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
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	44	cm ³ /10 min	ISO 1133
Density, (Method A)	1.36	g/cm ³	ISO 1183
Mechanical			
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
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.3	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	2.5	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	52	kJ/m ²	ISO 179
Hardness			
Ball Pressure Test, (90 °C)	Pass		IEC 60695-10-2
Thermal			
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
Electrical			
Comparative Tracking Index (CTI)	325	V	IEC 60112

Surface Resistivity	2700000000 0	ohm	IEC 60093
Flammable			
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
UL Information			
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		

Injection Parameters	Nominal Value	Units
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