Polyflam RABS 3000 NAT

LyondellBasell Industries - Acrylonitrile Butadiene Styrene

General Information

Product Description	
Flame retardant ABS standard grade without PBDE and higher stability	
General	
Additive	• Flame Retardant
Features	• Flame Retardant
Processing Method	• Injection Molding
Resin ID	• ABS FR(17)

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.17	g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	30	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	363000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	6670	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	2.7	%	ISO 527-2/1A/50
Flexural Modulus [2]	363000	psi	ISO 178
Flexural Stress [2]			ISO 178
4.5% Strain	10400	psi	
3.5% Strain	10200	psi	
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.4	ft·lb/in²	
73°F	4.8	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	21	ft·lb/in²	
73°F	43	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	192	°F	ISO 75-2/Bf
Deflection Temperature Under Load			ISO 75-2/Af
264 psi, Unannealed	181	°F	
Vicat Softening Temperature			
--	201	°F	ISO 306/B50
--	223	°F	ISO 306/A50
Ball Pressure Test (194°F)	Pass		IEC 60695-10-2
RTI Elec			UL 746B
0.06 in	140	°F	
0.12 in	140	°F	
RTI Imp			UL 746B
0.06 in	140	°F	
0.12 in	140	°F	

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Thermal	Nominal Value	Unit	Test Method
RTI Str			UL 746B
0.06 in	140	°F	
0.12 in	140	°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Flammability	**Nominal Value**	**Unit**	**Test Method**
Burning Rate [3]			
0.0787 in	0.0	in/min	FMVSS 302
0.0787 in	0.0	in/min	ISO 3795
Flame Rating			UL 94
0.06 in	V-0		
0.12 in	V-0		
Flammability Classification			IEC 60695-11-10, -20
0.06 in	V-0		
0.13 in	V-0		
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in	1760	°F	
0.12 in	1760	°F	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in	1290	°F	
0.12 in	1290	°F	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	158 to 176	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	428 to 464	°F
Mold Temperature	104 to 140	°F
Injection Rate	Slow-Moderate	
Back Pressure	725 to 1450	psi
Screw Speed	< 709	in/min