

Polyflam RABS 90000 UV5 CA Grau

Acrylonitrile Butadiene Styrene

LyondellBasell Industries

Engineering Plastics

Product Description

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

General

Features	- Flame Retardant - Good Processability	- Good Thermal Stability - Non-Blooming	Permanent Antistatic
UL File Number	E86615		
Processing Method	Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.36 g/cm ³	1.36 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	44 cm ³ /10min	44 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	225000 psi	1550 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	4350 psi	30.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	5.0 %	5.0 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.2 ft·lb/in ²	2.5 kJ/m ²	
73°F (23°C)	3.5 ft·lb/in ²	7.3 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	25 ft·lb/in ²	52 kJ/m ²	
73°F (23°C)	No Break	No Break	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	178 °F	81.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	154 °F	68.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	174 °F	79.0 °C	ISO 306/B50
--	214 °F	101 °C	ISO 306/A50
Ball Pressure Test (194°F (90°C))	Pass	Pass	IEC 60695-10-2
RTI Elec (0.12 In (3.0 Mm))	140 °F	60.0 °C	UL 746B
RTI Imp (0.12 In (3.0 Mm))	140 °F	60.0 °C	UL 746B
RTI Str (0.12 In (3.0 Mm))	140 °F	60.0 °C	UL 746B

Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	2.7E+10 ohms	2.7E+10 ohms	IEC 60093
Comparative Tracking Index	325 V	325 V	IEC 60112





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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	ISO 3795
0.0787 In (2.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	FMVSS 302
Flame Rating (0.12 In (3.0 Mm))	V-1	V-1	UL 94 IEC 60695-11-10, -20
Glow Wire Flammability Index			IEC 60695-2-12
0.06 In (1.5 Mm)	1760 °F	960 °C	
0.12 In (3.0 Mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 In (1.5 Mm)	1200 °F	650 °C	
0.12 In (3.0 Mm)	1200 °F	650 °C	
Oxygen Index	27 %	27 %	ISO 4589-2



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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	428 to 464 °F	220 to 240 °C
Mold Temperature	104 to 140 °F	40 to 60 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	725 to 1450 psi	5.00 to 10.0 MPa
Screw Speed	< 709 in/min	< 18 m/min

Injection Notes

Mould surface contacting melt should
be of non-corrosive steel (content of chrome > 12%)

Notes

These are typical property values not to be construed as specification limits.

