Technical Data Sheet

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/cm³	1.36 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°c/10.0 Kg)	44 cm³/10min	44 cm³/10min	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/in²	2.5 kJ/m²	
73°f (23°c)	3.5 ft·lb/in²	7.3 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	25 ft·lb/in²	52 kJ/m²	
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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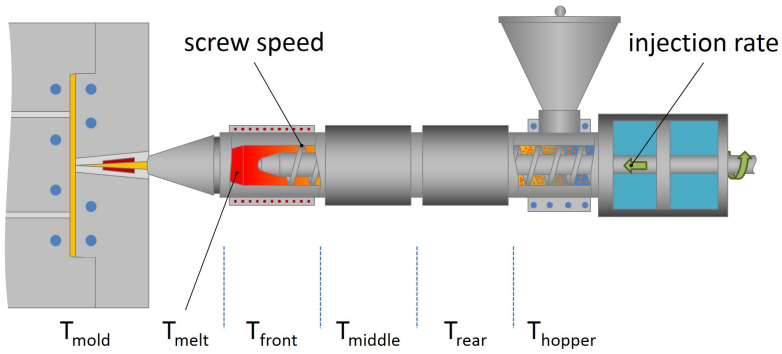

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	428 to 464 °F	220 to 240 °C
Mold Temperature	104 to 140 °F	40 to 60 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	725 to 1450 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.