

Technical Data Sheet

**Polyflam RMMK 125**

Acrylonitrile Butadiene Styrene + PA
LyondellBasell Industries
Engineering Plastics

Product Description

Flame-retardant ABS/PA blend; without PBDE; high stress crack resistance

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Flame Retardant	• High ESCR (Stress Crack Resist.)	
UL File Number	• E86615		
Processing Method	• Injection Molding		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.30	--	g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	12	--	cm ³ /10min	ISO 1133
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	363000 (2500)	136000 (940)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Yield)	7540 (52.0)	4210 (29.0)	psi (MPa)	ISO 527-2/1A/50
Tensile Strain (Yield)	3.0	16	%	ISO 527-2/1A/50
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	4.3 (9.0)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	5.7 (12)	10 (21)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	No Break	No Break		
73°F (23°C)	No Break	No Break		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
66 psi (0.45 MPa), Unannealed	235 (113)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	140 (60.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	313 (156)	--	°F (°C)	ISO 306/B50
--	374 (190)	--	°F (°C)	ISO 306/A50
Ball Pressure Test (257°F (125°C))	Pass	--		IEC 60695-10-2
RTI Elec				UL 746B
0.06 in (1.5 mm)	140 (60.0)	--	°F (°C)	
0.12 in (3.0 mm)	140 (60.0)	--	°F (°C)	

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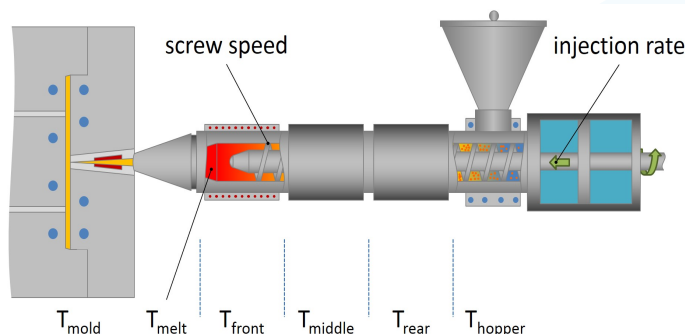
Thermal	Dry	Conditioned	Unit	Test Method
RTI Imp				UL 746B
0.06 in (1.5 mm)	140 (60.0)	--	°F (°C)	
0.12 in (3.0 mm)	140 (60.0)	--	°F (°C)	
RTI Str				UL 746B
0.06 in (1.5 mm)	140 (60.0)	--	°F (°C)	
0.12 in (3.0 mm)	140 (60.0)	--	°F (°C)	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	> 1.0E+15	--	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	--	ohms·m	IEC 62631-3-1
Comparative Tracking Index	200	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm), Self-Extinguishing	0.0	--	in/min (mm/min)	FMVSS 302
0.0787 in (2.00 mm), Self-Extinguishing	0.0	--	in/min (mm/min)	ISO 3795
Flame Rating				UL 94 IEC 60695-11-10, -20
0.06 in (1.5 mm)	V-0	--		
0.12 in (3.0 mm)	V-0	--		
0.08 in (2.0 mm)	5VA	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.030 in (0.75 mm)	1760 (960)	--	°F (°C)	
0.06 in (1.5 mm)	1760 (960)	--	°F (°C)	
0.12 in (3.0 mm)	1760 (960)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.06 in (1.5 mm)	1380 (750)	--	°F (°C)	
0.12 in (3.0 mm)	1380 (750)	--	°F (°C)	
Oxygen Index	31	--	%	ISO 4589-2

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Injection	Dry (English)	Dry (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	464 to 500 °F	240 to 260 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	725 to 1450 psi	5.00 to 10.0 MPa
Screw Speed	< 591 in/min	< 15 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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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