

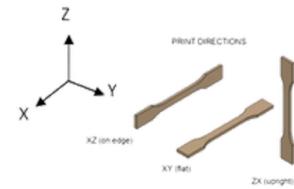


PYRA PC/ABS FR

Material class: Polycarbonate/ABS (PC/ABS)

Flame-Retardant & EN45545-2 Approved

- Flame retardant V0 at 1.5mm & 5VB at 2.5mm (UL)
- Base material meets R22/R23 according to EN45545-2
- Base material meets R118 for busses



Property	Method	Units	Value XZ** (on edge)	Value ZX** (upright)
Mechanical properties				
Tensile Modulus	ISO 527 Type 1BA	MPa	2500	2100
Tensile Strength at yield	ISO 527 Type 1BA	MPa	69	no yield
Tensile Strength at break	ISO 527 Type 1BA	MPa	63	33
Elongation at yield	ISO 527 Type 1BA	%	4.6	no yield
Elongation at break	ISO 527 Type 1BA	%	8.6	1.6
Flexural Modulus	ISO 178	Mpa		
Flexural Stress at break	ISO 178	Mpa		
Flexural Strain at break	ISO 178	%		
Impact Strength	ISO 180	J/m		
Impact Strength	ISO 180	kJ/m ²		

Property	Method	Units	Value
Thermal properties			
Glass transition temperature (Tg)	ISO 11357-1	°C	
Melting temperature	ISO 11357-3	°C	
Vicat softening temperature	ISO 306/B50	°C	
Temp. of deflection under load (1.80 Mpa)*	ISO 75-1/-2	°C	86
Temp of deflection under load (0.45 Mpa)*	ISO 75-1/-2	°C	
Physical properties			
Filament diameter (+/- 0.05 mm)		mm	1.75
Density	ISO 1183-1	g/cm3	1.18
Humidity absorption (70 °C, 62% r.H.)*	ISO1110	%	0.2
Water absorption (23 °C saturated)*	ISO 62	%	0.6

* Injection moulding data

Recommended processing conditions

Nozzle temperature	Recommended 270 °C (260 °C - 280°C)
Bed temperature	Recommended 110 °C (90 °C - 110 °C)
Chamber temperature	Recommended 90 °C (70 °C - 100 °C)
Bed material	(Textured) PEI Sheet, Glass, Carbon Fiber Plate
Adhesion promoter	Magigoo HT
Nozzle diameter	≥ 0.4mm
Print speed	Recommended: 30 mm/s (30-150 mm/s)
Drying instructions filament	90 °C for 3-4hours

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