NOVALUX® REC FR R50

novalca

PC compound,
with post-industrial raw material , flame retardant grade

FR: flame retardant, V0 at 3.0 mm**.**
R50: with at least 50% of post-industrial polymeric raw material. In compliance with ISO 14021:2016, self-declaration validated by TÜV NORD, certificate number IT-25519/2024.
Color: available in black and in a limited range of other colors on demand.
For injection molding of automotive, electric and industrial parts.

RECOMMENDED PROCESSING PARAMETERS FOR INJECTION MOLDING		
DRYING CONDITIONS	**BARREL TEMPERATURE**	**MOULD TEMPERATURE**
100 °C x 3 ÷ 4 hours **Recommended moisture level after drying ≤0.02%**	**270 ÷ 300 °C** **Standard melt temperature: 290 °C**	**80 ÷ 100 °C**
SHRINKAGE: Shrinkage is affected by the geometry and the wall thickness of the molded part by the position and size of the gate and by the processing parameters. In addition, glass-fiber reinforced products show a significant difference in the shrinkage perpendicular and parallel to the flow direction.		
PACKAGING		
25 Kg Bags, 1000 Kg Octabins, 750 Kg Boxes		

PROPERTIES	METHOD		UNIT	TYPICAL VALUES
PHYSICAL				
Density	ASTM D792	ISO 1183	gr/cm^3	**1.20**
Melt flow index (at 300°C – 1.2 Kg)	ASTM D1238	ISO 1133	g/10’	**12**
Humidity Absorption – (Equilibrium value, in air, 23°C, 50% RH)	INTERNAL METHOD		%	**0.12**
Mould Shrinkage	INTERNAL METHOD		%	**0.4 ÷ 0.8**
MECHANICAL				
Tensile strength: stress at yield	ASTM D638	ISO 527-1,-2	MPa	**60**
strain at break	ASTM D638	ISO 527-1,-2	%	**≥ 40**
Flexural modulus	ASTM D790	ISO 178	MPa	**2500**
IZOD notched impact strength, at 23 °C Specimen dimensions 62.5 mm x 12.7 mm x 3.2 mm	ASTM D256	-	J/m	**450**
THERMAL				
VICAT softening temperature at 49 N-120 °C/h	ASTM D1525/B	ISO 306/B	°C	**≥ 138**
Ball pressure test at 125±2 °C	BS 3456	IEC 60695-10-2	°C	**Passed**
FLAMMABILITY				
Flammability UL94 (thickness 3.2 mm)	UL94		Class	**V0**
Burning rate FMVSS302 (thicknesses 2.2/ 3.2 mm)	ISO 3795		mm/min	**Passed**

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