NOVALUX® REC FR FV10 R70

novalca

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

FR: flame retardant, V0 1.6 mm, GWFI 960°C
FV10: 10% glass fiber reinforced grade.
R70: with at least 70% 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, grey and in other colors on demand.
For injection molding of electric, electronic 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%**	**280 ÷ 310 °C** **Standard melt temperature: 300 °C**	**80 ÷ 120 °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	**1.27**
Melt Flow Index MFI (300°C – 1.2 Kg)	ASTM D1238	ISO 1133	g/10'	**13**
Humidity Absorption – (Equilibrium value, in air, 23°C, 50% RH)	INTERNAL METHOD		%	**0.10**
Mould Shrinkage	INTERNAL METHOD		%	**0.4 ÷ 0.6**
Reinforcing filler	INTERNAL METHOD		%	**10**
MECHANICAL				
Tensile strength: stress at break	ASTM D638	ISO 527-1,-2	MPa	**50**
strain at break	ASTM D638	ISO 527-1,-2	%	**8**
Flexural modulus	ASTM D790	ISO 178	MPa	**3400**
IZOD notched impact strength, at 23 °C (62.5 x 12.7 x 3.2 mm)	ASTM D256	-	J/m	
THERMAL				
VICAT softening temperature at 49 N-120 °C/h	ASTM D1525/B	ISO 306/B	°C	**140**
Ball pressure test at 125±2 °C	BS 3456	IEC 60695-10-2	°C	**Passed**
ELECTRICAL				
Surface resistivity	ASTM D257	IEC 60093	Ohm	**1E16**
Dielectric strenght	ASTM D149	IEC 60243-1	KV/mm	**36**
Dielectric constant at 10^6 Hz	ASTM D150	IEC 60250	-	**3.3**
Dissipation factor tang ∫ -10^6 Hz	ASTM D150	IEC 60250	-	**0.009**
Comparative tracking index (solution A, CTI)	VDE 0303-P1	IEC 60112	V	**175**
FLAMMABILITY				
Flammability UL94 (thickness 3.2 mm)	UL 94		Class	**V0**
Flammability UL94 (thickness 1.6 mm)	UL 94		Class	**V0**
Glow wire flammability GWFI (thickness 3.2 mm)	IEC 60695-2-12		°C	**960**
Glow wire flammability GWFI (thickness 2 mm)	IEC 60695-2-12		°C	**960**

Our technical data are provided for guidance purpose only for natural color compound and are based on average values. The data are not meant to be used for specification or warranted purposes. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the data have been established on standardized test specimens at room temperature. All technical information is subject to continuous update, so the customer shall always ensure that the latest release of technical information is at his own disposal. It is the customer's responsibility to inspect and test our products in order to determine to his own satisfaction whether they are suitable for his intended uses and applications or used in conjunction with third-party materials. Unless specifically stated with reference to the specific color code, the products mentioned herein are not suitable for applications in the pharmaceutical, medical, dental and toys sectors, in contact with foodstuff or for potable water transportation.

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