



novalca

NOVALUX® REC FR FV10 R50

**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.

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, 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/cm³	1.27
Melt Flow Index MFI (300°C – 1.2 Kg)		ASTM D1238	ISO 1133	g/10'	12
Humidity Absorption – (Equilibrium value, in air, 23°C, 50% RH)		INTERNAL METHOD		%	0.10
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	80
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.

Updating: January 2025

Printing date: 22 April 2025