



**novalca**

# **NOVALUX® REC FR R50**

**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.

<b>RECOMMENDED PROCESSING PARAMETERS FOR INJECTION MOLDING</b>		
<b>DRYING CONDITIONS</b>	<b>BARREL TEMPERATURE</b>	<b>MOULD TEMPERATURE</b>
<b>100 °C x 3 ÷ 4 hours</b>	<b>270 ÷ 300 °C</b>	<b>80 ÷ 100 °C</b>
<b>Recommended moisture level after drying ≤0.02%</b>	<b>Standard melt temperature: 290 °C</b>	
<b>SHRINKAGE:</b> 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.		
<b>PACKAGING</b>		
25 Kg Bags, 1000 Kg Octabins, 750 Kg Boxes		

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

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