

## RC (L) 600

### Polystyrene

### Technical Data Sheet

Edistir® RC (L) 600 is a high impact polystyrene exhibiting very high gloss. This grade is designed to be used both in injection moulding where an excellent surface finish is required, both, in L version, in extrusion and coextrusion of sheets with improved glossy aesthetics.

Designation: Thermoplastics ISO 2897-PS-I,M,088-06-04-18

### Applications

Edistir® RC (L) 600 is suitable in a large variety of sectors such as:

- refrigerator glossy inner liners
- decorative panels
- glossy households
- packaging for cosmetics
- sanitary.

### Typical processing data

Injection moulding:

- predrying normally not required
- melt temperature 200-250°C
- mould temperature 40-75°C

Extrusion:

- melt temperature 210-240°C

### Certification

✓ UL 94 ✓ IEC62321

Edistir® RC (L) 600, as supplied in the original packaging, by composition is compliant to some existing regulations on plastic materials intended for food contact.

### Storage

- ⚠ Store away from atmospheric agents and direct sunlight, away from sources of heat and light.
- 🕒 The product, if stored correctly, keeps its characteristics for at least fifteen months.

### General information

Edistir® RC (L) 600 is available in different color shades:

- natural
- white version, Versalis code 31630.



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Property	Test Conditions	Test method	Units	Values
<b>General</b>				
Water absorption	24h - 23°C	ISO 62	%	< 0,1
Density	-	ISO 1183	g/cm <sup>3</sup>	1,04
Bulk density	-	ISO 60	g/cm <sup>3</sup>	0,65
<b>Rheological</b>				
Melt flow rate	200°C - 5kg	ISO 1133	g/10'	6
<b>Mechanical</b>				
Tensile strain at break	50 mm/min	ISO 527	%	40
Tensile stress at break	50 mm/min	ISO 527	MPa	24,5
Tensile stress at yield	50 mm/min	ISO 527	MPa	29
Flexural strength	2 mm/min	ISO 178	MPa	53
Rockwell hardness	L/M	ISO 2039/2	-	L80
Tensile modulus	1 mm/min	ISO 527	MPa	1950
Izod impact strength, notched	-30°C - 4mm	ISO 180/1A	kJ/m <sup>2</sup>	3,5
Izod impact strength, notched	+23°C - 4mm	ISO 180/1A	kJ/m <sup>2</sup>	5,5
<b>Thermal</b>				
Coefficient of linear thermal expansion	-	ASTM D 696	10 <sup>-5</sup> /°C	9
Thermal conductivity	-	ISO 8302	W/(K.m)	0,17
Moulding shrinkage	-	ISO 294/4	%	0,4 - 0,7
Deflection temperature under load (annealed)	1,82 MPa - 120°C/h	ISO 75 A	°C	81
Vicat softening temperature	50 N - 50°C/h	ISO 306/B	°C	88
Vicat softening temperature	10 N - 50°C/h	ISO 306/A	°C	96
<b>Flammability</b>				
Flame behaviour	1,5 mm	UL 94	cl.	HB
Glow wire test (GWT)	1,6 mm	IEC 60695-2-10	°C	650
<b>Electrical</b>				
Dielectric constant (relative permittivity)	50 Hz	IEC 60250	-	2,5
Dissipation factor	50 Hz	IEC 60250	-	0,0003
Comparative tracking index (CTI)	Sol. A	IEC 60112	-	500
Surface resistivity	-	IEC 60093	10 <sup>15</sup> ohm	> 1,5
Volume resistivity	-	IEC 60093	10 <sup>15</sup> ohm-cm	> 7
Dielectric strength	-	IEC 60243	kV/mm	65

