

High molecular weight general purpose polystyrene with good mechanical strength and thermal resistance. N 3560 belongs to the third generation of Edistir® GPPS.

It is recommended for in-line forming of disposable packaging, sheet extrusion in blends with conventional or clear high impact PS and for injection moulding of complex items requiring good toughness and improved elasticity.

Thanks to N 3560, injected items will be brighter and neutral coloured, in line with more sophisticated market needs.

Designation: Thermoplastics ISO 1622-PS,G,095-03.

Applications

Suitable for thermoformed food packaging articles such as drink and dairy cups, plates, trays and for injection moulded cd boxes, internal fridge items, domestic appliances, stationery, cutlery and houseware.

Typical processing data

Extrusion:

- melt temperature 210-240°C

Injection moulding

predrying normally not required

- melt temperature 200-260°C
suggested temperature around 240°C
- mould temperature 10-50°C

General information

This product in the natural version complies by composition with the requirements of the main Regulations for plastic materials intended to come into contact with food, including Regulation (EU) No 10/2011 and following amendments.



Property	Test Conditions	Test method	Units	Values
General				
Water absorption	24h - 23°C	ISO 62	%	<0,1
Density	-	ISO 1183	g/cm ³	1,05
Bulk density	-	ISO 60	g/cm ³	0,65
Rheological				
Melt flow rate	200°C - 5kg	ISO 1133	g/10'	3,8
Mechanical				
Tensile strain at break	5 mm/min	ISO 527	%	2
Tensile stress at break	5 mm/min	ISO 527	MPa	40
Flexural strength	2 mm/min	ISO 178	MPa	75
Rockwell hardness	L/M	ISO 2039/2	-	M80
Tensile modulus	1 mm/min	ISO 527	MPa	3250
Izod impact strength, notched	+23°C - 4mm	ISO 180/1A	kJ/m ²	1,8
Izod impact strength, notched	-30°C - 4mm	ISO 180/1A	kJ/m ²	1,6
Thermal				
Coefficient of linear thermal expansion	-	ASTM D 696	10 ⁻⁵ /°C	7
Thermal conductivity	-	ISO 8302	W/(K.m)	0,17
Moulding shrinkage	-	ISO 294/4	%	0,3-0,6
Deflection temperature under load (annealed)	1,82 MPa - 120°C/h	ASTM D 648	°C	84
Vicat softening temperature	50 N - 50°C/h	ISO 306/B	°C	91
Vicat softening temperature	10 N - 50°C/h	ISO 306/A	°C	97
Flammability				
Flame behaviour	1,5 mm	UL 94	cl.	HB
Glow wire test (GWT)	1,6 mm	IEC 60695-2-1	°C	-
Glow wire test (GWT)	1,6 mm	IEC 60695-2-1	°C	650
Electrical				
Dielectric constant (relative permittivity)	50 Hz	IEC 60250	-	2,5
Dissipation factor	50 Hz	IEC 60250	-	0,0002
Comparative tracking index (CTI)	Sol. A	IEC 60112	-	400
Surface resistivity	-	IEC 60093	10 ¹⁵ ohm	>1,5
Volume resistivity	-	IEC 60093	10 ¹⁵ ohm.cm	>7
Dielectric strength	-	IEC 60243	kV/mm	70

