

N 3380

Technical Data Sheet

Polystyrene

Edistir® N 3380 is a high molecular weight general purpose polystyrene combining high heat resistance and good mechanical strength. Edistir® N 3380 is suitable for direct gassing extrusion, biaxially oriented film and sheet, glass clear sheets and panels.

Also used in injection moulding of medium wall-thickness transparent parts.

Thanks to Edistir® N 3380, injected items will be bright and neutral coloured in line with the most sophisticated market needs.

Designation: Thermoplastics ISO 1622-PS,G,105-03.

Applications

Edistir® N 3380 is suitable in a large variety of sectors such as:

- foamed packaging trays
- clear panels for shower cubicles
- insulation boards (XPS)
- BOPS
- clear moulded fridge components
- medical items.

Typical processing data

Extrusion:

- melt temperature 210-240°C

Injection moulding:

- predrying normally not required
- melt temperature 220-270°C
suggested temperature around 240°C
- mould temperature 20-60°C

Certification

✓ UL 94

Edistir® N 3380, 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

For further information, please contact Versalis directly writing to info.styrenics@versalis.eni.com.

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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'	2
Mechanical				
Tensile strain at break	5 mm/min	ISO 527	%	2,5
Tensile stress at break	5 mm/min	ISO 527	MPa	49
Flexural strength	2 mm/min	ISO 178	MPa	91
Rockwell hardness	L/M	ISO 2039/2	-	M80
Tensile modulus	1 mm/min	ISO 527	MPa	3300
Izod impact strength, notched	+23°C - 4mm	ISO 180/1A	kJ/m ²	1,9
Izod impact strength, notched	-30°C - 4mm	ISO 180/1A	kJ/m ²	1,7
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	ISO 75 A	°C	95
Vicat softening temperature	10 N - 50°C/h	ISO 306/A	°C	106
Vicat softening temperature	50 N - 50°C/h	ISO 306/B	°C	101
Flammability				
Flame behaviour	1,5 mm	UL 94	cl.	HB
Glow wire test (GWT)	1,6 mm	IEC 60695-2-10	°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)	SoI. A	IEC 60112	-	425
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

Please consult the relevant safety data sheet for more detailed information.

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