

N 3982

Polystyrene

Technical Data Sheet

Edistir® N 3982 is a general purpose polystyrene with good flow and high heat resistance. Edistir® N 3982 is a special grade for direct gassing extrusion of heavy gauge insulating boards (XPS). It can also be used as a low viscosity processing aid and modifier for compounding.

Designation: Thermoplastics ISO 1622-PS,E,105-20.

Applications

Edistir® N 3982 is suitable for:

- XPS insulation panels
- masterbatch carrier
- modifier for thermoplastic elastomers and rubber.

Typical processing data

Extrusion:

- melt temperature 190-220°C

Certification

✓ UL 94

Edistir® N 3982, 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.



N 3982

Polystyrene

Technical Data Sheet

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'	25
Mechanical				
Tensile strain at break	5 mm/min	ISO 527	%	1
Tensile stress at break	5 mm/min	ISO 527	MPa	30
Flexural strength	2 mm/min	ISO 178	MPa	40
Tensile modulus	1 mm/min	ISO 527	MPa	3150
Thermal				
Coefficient of linear thermal expansion	-	ASTM D 696	10 ⁻⁵ /°C	7
Thermal conductivity	-	ISO 8302	W/(K·m)	0,17
Deflection temperature under load (annealed)	1,82 MPa - 120°C/h	ISO 75 A	°C	89
Vicat softening temperature	50 N - 50°C/h	ISO 306/B	°C	101
Vicat softening temperature	10 N - 50°C/h	ISO 306/A	°C	106
Flammability				
Flame behaviour	1,5 mm	UL 94	cl.	HB

