

N 3982

Technical Data Sheet

Polystyrene

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.

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' | 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 |

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

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