

SABIC® PS 330

HIGH IMPACT POLYSTYRENE FOR SHEET EXTRUSION

DESCRIPTION

PS 330 is high Impact Polystyrene manufactured by continuous mass polymerization of styrene monomer. An elastomer is incorporated during polymerization to achieve impact resistance property. It is generally opaque in color. It is a high impact strength polystyrene with high heat deflection temperature and good physical properties.

TYPICAL APPLICATIONS

PS 330 is primarily designed for extrusion and thermoforming applications. It can be used for food packaging and dairy products.

TYPICAL PROPERTY VALUES

Revision 20230120

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------------------------------------|----------------|-------------------|--------------|
| PHYSICAL | | | |
| Melt Flow Rate, 230°C/2.16 kgf ⁽¹⁾ | 4 | g/10 min | ASTM D1238 |
| POLYMER PROPERTIES | | | |
| Load Density@ 23°C | 1040 | kg/m ³ | ASTM D792 |
| Bulk Density (Method B) | 600 | kg/m ³ | ASTM D1895 |
| MECHANICAL PROPERTIES | | | |
| Tensile Strength | 29 | MPa | ASTM D638 |
| Tensile Elongation | 50 | % | ASTM D638 |
| Tensile modulus | 2353 | MPa | ASTM D638 |
| Flexural Strength | 44 | MPa | ASTM D790 |
| Flexural Modulus | 2647 | MPa | ASTM D790 |
| Izod impact notched at 23 °C | 110 | J/m | ASTM D256A |
| Rockwell Hardness, L-Scale ⁽²⁾ | 67 | - | ASTM D785 |
| M-Scale | 10 | - | ASTM D785 |
| THERMAL PROPERTIES | | | |
| Flammability Rating, UL 94 | | | |
| @ 1.3 mm and 3 mm (natural color) | HB | Class | |
| Vicat Softening Point, (Rate A/50°C) | 99 | °C | ASTM D1525 |
| Heat Deflection Temperature (Method B, 455 KPa, Annealed) | 97 | °C | ASTM D648 |

(1) Typical values; not to be construed as specification limits.

(2) Based on injection molded specimens.

PROCESSING CONDITIONS

Typical extruder barrel temperature (°C) profile for PS 330: 185-205, Die temperature (°C) : 215

STORAGE AND HANDLING

PS 330 is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.



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