

Product Information

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Polystyrol BX 3580

PS-I



Product description

Polystyrol BX 3580 is an easy flowing, high impact grade that is especially suitable for injection blow moulding and injection stretch blow moulding.

Processing

Polystyrol BX 3580 can be injection molded at temperatures between 180 and 250°C. Recommended blow moulding temperatures are between 110 and 150 °C. Blow moulding pressures between 5 and 10 bar are sufficient.

Applications

Bottles

Physical form and Storage

Polystyrol BX 3580 should be kept in its original containers in cool, dry place. Avoid direct exposure to sunlight. Polystyrol BX 3580 can be stored in silos.

Food legislation

If used unmodified and under appropriate processing conditions, parts from Polystyrol BX 3580 comply with the usual requirements for food packaging. For detailed written confirmations please contact our regional sales offices.

Product safety

During processing of Polystyrol BX 3580 small quantities of styrene monomer may be released into the atmosphere. At styrene vapour concentrations below 20 ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well ventilated workplaces - that is where five to eight air changes per hour are made.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. In order to check the availability of products please contact us or our sales agency.

Typical values at 23°C ¹⁾	Test method ²⁾	Unit	Values ³⁾
Mechanical Properties			
Yield stress, 50 mm/min	ISO 527-1/-2	MPa	23
Yield strain, 50 mm/min	ISO 527-1/-2	%	1.5
Nominal strain at break, 50 mm/min	ISO 527-1/-2	%	30
Tensile modulus	ISO 527-1/-2	MPa	1850
Charpy impact strength (23°C)	ISO 179/1eU	kJ/m ²	N
Charpy impact strength (-30°C)	ISO 179/1eU	kJ/m ²	160
Charpy notched impact strength (23°C)	ISO 179/1eA	kJ/m ²	10
Thermal properties			
Vicat softening temperature VST/B/50	ISO 306	°C	87
Vicat softening temperature VST/A/50	ISO 306	°C	99
Processing			
Melt volume-flow rate MVR 200/5	ISO 1133	cm ³ /10min	4
Melt temperature, injection molding	-	°C	180 - 250
Other properties			
Density	ISO 1183	kg/m ³	1050
Water absorption, equilibrium in water at 23°C	similar to ISO 62	%	<0.1
Moisture absorption, equilibrium 23°C/50% r.h.	similar to ISO 62	%	<0.1

Footnotes

1) If the product definition doesn't state otherwise.

2) Specimens according to CAMPUS.

3) The asterisk symbol "*" signifies inapplicable properties.