

Revision 20220218

# 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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Melt Flow Rate, 230°C/2.16 kgf <sup>(1)</sup>	4	g/10 min	ASTM D1238
POLYMER PROPERTIES			
Load Density@ 23°C	1040	kg/m <sup>3</sup>	ASTM D792
Bulk Density (Method B)	600	kg/m <sup>3</sup>	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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