

Technical Information

## ABS Virgin Standard type

Overview

ABS Virgin Standard type is an excellent general purpose extrusion / thermoforming resin with outstanding processability. The mass (continuous process) ABS technology of the supplier ensures an ABS resin that combines excellent processability with a stable light base colour that is ideal for self-colouring. The ABS Virgin Standard type has an ultra low particulate content, which results in a superb surface finish that will enable our customers to produce parts with excellent aesthetics at a lower total cost.

Applications:

- Transportation
- Sanitary ware
- Signage
- Furnishings
- Protective covers
- Marine
- Recreational vehicles

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.05	g/cm <sup>3</sup>	1.05	g/cm <sup>3</sup>	ISO 1183/B
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	4.7	g/10min	4.7	g/10min	ISO 1133
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	0.409	in <sup>3</sup> /10min	6.70	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage - Flow	0.0040 to 0.0070	in/in	0.40 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tensile Modulus					
0.126 in (3.20 mm), Injection Molded	312000	psi	2150	MPa	ISO 527-2
Tensile Stress					
Yield, 0.126 in (3.20 mm), Injection Molded	624 0	psi	43.0	MPa	ISO 527-2/50
Tensile Strain					
Yield, 0.126 in (3.20 mm), Injection Molded	2.7	%	2.7	%	ISO 527-2/50
Flexural Modulus					
0.126 in (3.20 mm), Injection Molded	305000	psi	2100	MPa	ISO 178 <sup>1,2</sup>
Flexural Strength					
0.126 in (3.20 mm), Injection Molded	10200	psi	70.0	MPa	ISO 178 <sup>1,2</sup>
Impact	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Charpy Notched Impact Strength					
-22°F (-30°C), Injection Molded	6.2	ft•lb/in <sup>2</sup>	13	kJ/m <sup>2</sup>	ISO 179/1eA ISO
-22°F (-30°C), Injection Molded	3.8	ft•lb/in <sup>2</sup>	8.0	kJ/m <sup>2</sup>	179/1eA
73°F (23°C), Injection Molded	8.6	ft•lb/in <sup>2</sup>	18	kJ/m <sup>2</sup>	179/2C ISO
73°F (23°C), Injection Molded	6.2	ft•lb/in <sup>2</sup>	13	kJ/m <sup>2</sup>	ISO 179/2C
Notched Izod Impact Strength					
-22°F (-30°C), Injection Molded	5.2	ft•lb/in <sup>2</sup>	11	kJ/m <sup>2</sup>	ISO 180/A
73°F (23°C), Injection Molded	9.0	ft•lb/in <sup>2</sup>	19	kJ/m <sup>2</sup>	
Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Heat Deflection Temperature					
264 psi (1.8 MPa), Annealed	214	°F	101	°C	ISO 75-2/A
Vicat Softening Temperature	216	°F	102	°C	ISO 306/B50
Flammability	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Burning Rate (0.0787 in (2.00 mm))	2.0	in/min	50	mm/min	ISO 3795 <sup>3</sup>
Flame Rating - UL					UL 94 <sup>3</sup>
0.0591 in (1.50 mm)	HB		HB		
0.118 in (3.00 mm)	HB		HB		

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

<sup>1</sup> 0.079 in/min (2.0 mm/min)

<sup>2</sup> 3-points

<sup>3</sup> This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.



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