



SkyGate Polymer Sdn Bhd

Reg No: 202401023225 (1569074-W)

POLYSTYRENE (PS) TECHNICAL DATA SHEET

ITEM		TEST METHOD	UNIT	PS
		ASTM		
OPTICAL	Refractive Index	ASTM D542	-	1.586
	Total Transmission	ASTM D1003	%	90
	Haze	ASTM D1003	%	<0.5
THERMAL	Coefficient of Linear Expansion	ASTM D696	mm/°C	8.9
	Vicat Softening Temperature (VST)	ASTM D1525 ¹²	°C	103
	Deflection Temperature Under Load 1.82 Mpa (unannealed)	ASTM D648	°C	85
	Melt Flow Rate (MFR) 300°C, 1.2kg	ASTM D1238	g/10min.	5
MECHANICAL	Tensile Strength at break	ASTM D638	Mpa	50
	Tensile Strain at break	ASTM D638	%	2
	Flexural Strength	ASTM D790	Mpa	-
	Flexural Modulus	ASTM D790	Mpa	3300
	Izod Impact Strength (notched)	ASTM D256	kg/m ²	8.00
	Rockwell Hardness Scale R	ASTM D785	-	-
ELECTRICAL	Volume Resistivity	ASTM D257	Ω cm	>10 ¹³
	Dielectric Strength (1.6mm)	ASTM D149	kV/mm	152
	Dielectric Constant (1MHz)	ASTM D150	-	-
	Dissipation Factor (1MHZ)	ASTM D150	-	-
OTHER	Specific Gravity	ASTM D792	g/cm ³	1.04
	Mold Shrinkage	ASTM D955	%	0.4 - 0.7
	Water Absorption	ASTM D570	%	0.04
	Flammability (1.6mm)	UL 94	-	-

*The above data are typical laboratory values and are intended to serve as guides only.

Benefits

Optical Clear
Light Transmittance 90%
Lightweight
Cost-Effective
Easy Maintenance

Applications

Lighting Fixtures
Shower Door Panel
Consumer Goods
Medical Trays
Packaging
Cosmetic Containers

30 Years of
Extrusion
Excellence

A-PLAS®

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