

TOTAL Polystyrene Crystal 1441

General Purpose Polystyrene

TOTAL Refining & Chemicals

Message:

Polystyrene Crystal 1441 is an easy flow Polystyrene for injection molding application. It offers low viscosity at high shear rate, that allows an easy injectability, and a high softening point.

Applications:

Cutlery

Household

Toy

General Information			
Features	Low viscosity		
	Good liquidity		
Uses	Kitchen utensils		
	Household goods		
	Toys		
Agency Ratings	EC 1907/2006 (REACH)		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.04	g/cm ³	ASTM D792
Apparent Density ¹	0.60	g/cm ³	ASTM D1895
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	8.0	g/10 min	ASTM D1238
Spiral Flow ²	55.0	cm	ASTM D3123
Molding Shrinkage - Flow	0.40 - 0.70	%	ASTM D955
Water Absorption (24 hr)	0.040	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (L scale, 23°C, injection molding)	70		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield, 23°C, Injection Molded)	45.0	MPa	ASTM D638
Tensile Elongation (Break, 23°C, Injection Molded)	2.0	%	ASTM D638
Flexural Modulus (23°C, Injection Molded)	3050	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Unnotched Izod Impact (23°C, Injection Molded)	64	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	97.0	°C	ASTM D1525 ³

CLTE - Flow	8.9E-5	cm/cm/°C	ASTM D696
Heat Distortion	80	°C	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	IEC 60093
Dielectric Strength	150	kV/mm	ASTM D149
Injection	Nominal Value	Unit	
Rear Temperature	150 - 180	°C	
Middle Temperature	180 - 210	°C	
Front Temperature	210 - 230	°C	
Nozzle Temperature	210 - 250	°C	
Injection instructions			
Zone 4 Temperature: 210 to 250°C			
NOTE			

1.	Bulk Density: Bulk Density of all Natural grades is approximately 0.6 g/cm ³
2.	Mold temperature: 220°C
3.	速率 A (50°C/h), 压力1 (10N)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

