STYRON™ 636 BT

General Purpose Polystyrene Resin

Trinseo

Message:

STYRON™ 636 BT is a general purpose polystyrene with a specific Blue Tone color designed for injection molded appliance applications. It is a high molecular weight material suitable for extrusion blending with high impact polystyrene. Its high strength makes it ideally suited for packaging applications and refrigerator accessories.
Applications:
Injection molded appliance accessories and containers with a light blue tint
Packaging foam extrusion
Thermoformed containers blended with HIPS
Complies with:
Europe REGULATION (EC)10/2011
U.S. FDA 21 CFR 177.1640
Consult the regulations for complete details.

General Information	
Features	High molecular weight High strength
Uses	Packaging Electrical appliances Mixing Home appliance components Container
Agency Ratings	FDA 21 CFR 177.1640 Europe No 10/2011
Appearance	Blue
Forms	Particle
Processing Method	Foam extrusion molding Sheet extrusion molding Thermoforming Injection molding

Physical	Nominal Value	Unit	Test Method
Density			
--	1.05	g/cm³	ISO 1183
--	1050	kg/m³	ISO 1183 [1]
Apparent Density	0.60	g/cm³	ISO 60
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.1	g/10 min	ISO 1133
Water Absorption (Saturation)	0.0	%	ISO 62 [2]

Viscosity Number	116	cm^3/g	ISO 307, 1157, 1628 [3]
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	105		ISO 2039-2
Ball Indentation Hardness	150	MPa	ISO 2039-1
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3300	MPa	ISO 527-2 [4]
Tensile Stress			
Yield	55.0	MPa	ISO 527-2/5
Yield	48.0	MPa	ISO 527-2 [5]
Tensile Strain			
Yield	2.0	%	ISO 527-2 [6]
Fracture	2.0	%	ISO 527-2/5
Tensile Elongation at Break	3.0	%	ISO 527-2 [7]
Flexural Modulus	3500	MPa	ISO 178
Flexural Stress	80.0	MPa	ISO 178
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, annealed	92.8	°C	ISO 75-2/B
1.8 MPa, annealed	90.0	°C	ISO 75-2/A
Vicat Softening Temperature	96.5	°C	ISO 306/A120
Linear expansion coefficient			ISO 11359-2 [8]
Flow	8.0E-5	cm/cm/°C	ISO 11359-2
Lateral	7.0E-5	cm/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+13	ohms	IEC 60093 [9]
Volume Resistivity	> 1.0E+15	ohms·m	IEC 60093 [10]
Electric strength	140	kV/mm	IEC 60243-1 [11]
Dielectric Constant			
1 MHz	2.50		ASTM D150, IEC 60250 [12]
100 Hz	2.50		IEC 60250 [13]
Dissipation Factor			
1 MHz	6.0E-5		ASTM D150, IEC 60250 [14]
100 Hz	9.0E-5		IEC 60250 [15]
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating [16] (1.6 mm)	HB		UL 94
Burning Behav. at 1.6mm nom. thickn. (1.60 mm, UL)	HB		ISO 1210 [17]
NOTE			
1.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???		
2.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???		

3.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
4.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
5.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
6.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
7.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
8.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
9.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
10.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
11.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
12.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
13.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
14.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
15.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???
16.	This rating is not intended to reflect the danger caused by this or any other material under actual fire conditions.
17.	??????,?? ISO 10350 ??? 23°C/50%r.h. ???

Recommended distributors for this material

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