

Zyntar[®] 7000

Data Sheet

Zyntar[®] Ignition Resistant Polystyrene

Zyntar[®] 7000 is a V-0 ignition resistant, high flow, high impact polystyrene resin for injection molding.

Applications

Zyntar[®] 7000 is primarily designed for television cabinets, exercise equipment, consumer electronics, and business equipment.

Typical Properties for Uncolored Products

	Test method ASTM	SI Unit	Value	English Unit	English Value
MECHANICAL PROPERTIES					
Tensile Stress at Yield	D 638	MPa	25	psi	3600
Tensile Stress at Break	D 638	MPa	21	psi	3000
Tensile Elongation	D 638	%	40	%	40
Flexural Modulus	D 790-1	MPa	2100	psi	300000
Notched Izod Impact Strength	D 256-A	J/m	120	ft-lbs/in	2.3
THERMAL PROPERTIES					
Vicat Softening Temperature	D 1525	°C	97	°F	207
Temp.of Deflection Under Load at 264 psi	D 648	°C	88	°F	190
PROCESSING					
Nominal Melt Flow Rate (200 °C, 5000g)	D 1238	g/10 min	10.0	g/10 min	10.0
Melt Temperature Range (Molding)	-	°C	200-240	°F	400-460
FLAMMABILITY					
UL (Solid) 1.5 mm All Color	94	class	V-0		V-0
UL (Foamed) 4.6 mm Natural	94	Class	5VA		5VA
MISCELLANEOUS PROPERTIES					
Density	D 792	g/cm ³	1.16	g/cm ³	1.16
Water Absorption (Saturation in water at 23°C)		%	<0.15	%	<0.15
Moisture Absorpt. (23°C/50% r.h.)		%	<0.1	%	<0.1
Mold Shrinkage	D 955	%	0.4-0.6	%	0.4-0.6

Processing

Although Zyntar[®] 7000 can be processed by any method applicable to polystyrene-based plastics, it is best suited for injection molding. The melt temperature should not exceed 250 °C.

Handling and Safety

Zyntar[®] 7000 is not known to have any ill effect on workers in an adequately ventilated molding shop when it is processed by usual methods used for polystyrene-based plastics. During processing of Zyntar[®] 7000 small quantities of styrene monomer may be released into the atmosphere. At styrene vapor concentrations below 20 ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well-ventilated workplaces - that is where five to eight air changes per hour are made.

Packaging and Samples

Zyntar[®] 7000 is supplied in pellet form. It has to be stored original containers in a cool, dry place. Avoid direct exposure to sunlight. Zyntar[®] 7000 can also be stored in silos. Samples are available on request.

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