

# Zyntar<sup>®</sup> 702

# Data Sheet

## Zyntar<sup>®</sup> Ignition Resistant Polystyrene

Zyntar<sup>®</sup> 702 is a V-0 ignition-resistant high-impact polystyrene resin for injection molding, extrusion and thermoforming.

### Applications

Zyntar<sup>®</sup> 702 is primarily designed for television cabinets and enclosures.

### Typical Properties for Uncolored Products\*

	Test method	SI	Value	English	Value
	ASTM	Unit		Unit	
<b>MECHANICAL PROPERTIES</b>					
Tensile Stress at Yield	D 638	MPa	29	psi	4200
Tensile Stress at Break	D 638	MPa	24	psi	3500
Tensile Elongation	D 638	%	35	%	35
Flexural Modulus	D 790-1	MPa	2206	psi	320000
Notched Izod Impact Strength	23°C D 256-A	J/m	90	ft-lbs/in	1.7
<b>THERMAL PROPERTIES</b>					
Vicat Softening Temperature	D 1525	°C	98	°F	208
Temp.of Deflection Under Load at 264 psi	D 648	°C	89	°F	192
<b>PROCESSING</b>					
Nominal Melt Flow Rate (200 °C, 5000g)	D 1238	g/10 min	5.5	g/10 min	5.5
Melt Temperature Range (Molding)	-	°C	200-240	°F	400-460
<b>FLAMMABILITY</b>					
UL (Solid) 1.5 mm All Color	94	class	V-0		V-0
UL (Foamed) 6.0 mm Natural	94	Class	5VA		5VA
<b>MISCELLANEOUS PROPERTIES</b>					
Density	D 792	g/cm <sup>3</sup>	1.17	g/cm <sup>3</sup>	1.17
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<sup>®</sup> 702 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<sup>®</sup> 702 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<sup>®</sup> 702 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<sup>®</sup> 702 is supplied in pellet form. It has to be stored original containers in a cool, dry place. Avoid direct exposure to sunlight. Zyntar<sup>®</sup> 702 can also be stored in silos. Samples are available on request.

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