

# Toyolac™ 990 X88

Toray Industries, Inc. - Methyl Methacrylate / ABS

## General Information

Product Description			
High flow, High impact			
General			
Features	• High Flow	• High Impact Resistance	• Pleasing Surface Appearance
Uses	• Camera Applications • Cell Phones	• Cosmetics • Toys	• White Goods & Small Appliances • Writing Instruments
Appearance	• Clear/Transparent		
Processing Method	• Extrusion • Film Extrusion	• Injection Molding • Sheet Extrusion	
ISO Designation	• >MABS<		

## Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.09	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	26	g/10 min	ISO 1133
Molding Shrinkage <sup>2</sup>	0.40 to 0.60	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (73°F)	6820	psi	ISO 527-2
Tensile Strain (Break, 73°F)	15	%	ISO 527-2
Flexural Modulus (73°F)	319000	psi	ISO 178
Flexural Stress (73°F)	10000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	5.7	ft·lb/in <sup>2</sup>	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	167	°F	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94
Optical	Nominal Value	Unit	Test Method
Light Transmittance <sup>3</sup>	89.0	%	ISO 13468
Haze <sup>3</sup>	2.00	%	ISO 14782

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 23°C/50%RH

<sup>3</sup> 23°C/50%RH, 3mm thickness