

Toyolac™ 912 X01 U

Toray Industries, Inc. - *Methyl Methacrylate / ABS*

General Information

Product Description

High scratch resistant

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Good Scratch Resistance	• High Strength	• Pleasing Surface Appearance
Uses	• Camera Applications • Office Automation Equipment	• Toys • White Goods & Small Appliances	
Appearance	• Clear/Transparent		
Processing Method	• Film Extrusion	• Injection Molding	• Sheet Extrusion
ISO Designation	• >MABS<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.10	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	30	g/10 min	ISO 1133
Molding Shrinkage ²	0.40 to 0.60	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (73°F)	8120	psi	ISO 527-2
Tensile Strain (Break, 73°F)	12	%	ISO 527-2
Flexural Modulus (73°F)	381000	psi	ISO 178
Flexural Stress (73°F)	12000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.9	ft·lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	172	°F	ISO 75-2/A
Vicat Softening Temperature	185 to 194	°F	
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.04 in, Black color	HB		
0.05 in, All color	HB		
Optical	Nominal Value	Unit	Test Method
Light Transmittance ³ (Total)	78.0	%	ISO 13468
Haze ³	16.0	%	ISO 14782

Notes

¹ Typical properties: these are not to be construed as specifications.

² 23°C/50%RH

³ 23°C/50%RH, 3mm thickness

