

Toyolac™ 912 X01 U

Toray Industries, Inc. - Methyl Methacrylate / ABS

General Information

| Product Description | | | |
|------------------------|--|--|-------------------------------|
| High scratch resistant | | | |
| General | | | |
| 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