

Plexiglas® MI7T

Polymethyl Methacrylate Acrylic

Altuglas International of Arkema Inc.

Message:

Plexiglas® MI7T is an impact modified thermoplastic acrylic resin formulated for injection molding and extrusion applications. It has high heat resistance and provides 7 times the impact resistance of standard acrylics while maintaining excellent optical properties. It offers an excellent balance between melt flow and increased resistance to breakage, while providing weatherability superior to that provided by other high-impact plastics. Supplemental moldflow simulation data is available.

| General Information | | | |
|--|---------------------------|-------------------|-------------|
| UL YellowCard | E39437-231420 | | |
| Additive | Impact Modifier | | |
| Features | BPA Free | | |
| | Good Impact Resistance | | |
| | Good Weather Resistance | | |
| | High Heat Resistance | | |
| | Impact Modified | | |
| Uses | Automotive Applications | | |
| | Automotive Exterior Parts | | |
| RoHS Compliance | RoHS Compliant | | |
| Appearance | Clear/Transparent | | |
| | Colors Available | | |
| | Opaque | | |
| | Translucent | | |
| Forms | Pellets | | |
| Processing Method | Extrusion | | |
| | Injection Molding | | |
| Physical | Nominal Value | Unit | Test Method |
| Specific Gravity | 1.17 | g/cm ³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg) | 1.8 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow | 0.30 to 0.60 | % | ASTM D955 |
| Water Absorption (24 hr) | 0.30 | % | ASTM D570 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (M-Scale) | 68 | | ASTM D785 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 2410 | MPa | ASTM D638 |
| Tensile Strength (Yield) | 55.2 | MPa | ASTM D638 |

| | | | |
|--|-----------------------------------|-------|-------------------------|
| Tensile Elongation (Break) | 35 | % | ASTM D638 |
| Flexural Modulus | 2410 | MPa | ASTM D790 |
| Flexural Strength (Yield) | 86.9 | MPa | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (23°C) | 32 | J/m | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load ¹ (1.8 MPa, Annealed) | 90.6 | °C | ASTM D648 |
| Vicat Softening Temperature | | | |
| -- | 108 | °C | ASTM D1525 ² |
| -- | 97.2 | °C | ASTM D1525 ³ |
| Thermal Conductivity | 0.19 | W/m/K | ASTM C177 |
| Optical | Nominal Value | Unit | Test Method |
| Refractive Index ⁴ | 1.490 | | ASTM D542 |
| Transmittance (3180 μm) | 92.0 | % | ASTM D1003 |
| Haze (3180 μm) | < 2.0 | % | ASTM D1003 |
| Additional Information | Nominal Value | | Test Method |
| ASTM Classification | PMMA 0221V1 | | ASTM D788 |
| NOTE | | | |
| 1. | Annealing cycle: 4hrs @ 176°F | | |
| 2. | Rate A (50°C/h), Loading 1 (10 N) | | |
| 3. | Rate A (50°C/h), Loading 2 (50 N) | | |
| 4. | ND @ 72°F | | |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

