

PMMA
Impact Resistant Grade

HI532U15

Description

Impact resistance grade
High UV protection
Good for exterior application
High light transmission
Good mechanical strength, surface hardness, weather resistance

Application

Home appliance cover housing & front door, UV-Blocking sheet/Film
Road Traffic sign, Multi-wall sheet, Corrugated sheet

Table

| PROPERTY | CONDITION | UNIT | METHOD | VALUE |
|--|-------------|-------------------|-----------------|--------------------|
| OPTICAL PROPERTIES | | | | |
| Refractive Index | nd | - | ISO 489 | 1.49 |
| Light Transmittance | 3mm | % | ISO 13468-1 | 91 |
| Haze | 3mm | % | ISO 14782 | <1.5 |
| THERMAL PROPERTIES | | | | |
| Melt Flow Index | 230°C/3.8kg | g/10min | ISO 1133 | 2.7 |
| VICAT Softening Point | B/50 | °C | ISO 306 | 102 |
| Heat Deflection Temperature | 1.8MPa | °C | ISO 75 | 94 |
| Coefficient of Linear Expansion | - | 1/°C | ASTM D696 | 7X10 ⁻⁵ |
| MECHANICAL PROPERTIES | | | | |
| Charpy Impact Strength | notched | kJ/m ² | ISO 179 | 3.0 |
| Rockwell Hardness | M scale | - | ISO 2039-2 | 80 |
| Tensile Strength at Break | 5mm/min | MPa | ISO 527 | 50 |
| Tensile Strain at Break | 5mm/min | % | ISO 527 | 30 |
| Tensile Modulus | 1mm/min | GPa | ISO 527 | 2.3 |
| Flexural Strength | 2mm/min | MPa | ISO 178 | 93 |
| Flexural Modulus | 2mm/min | GPa | ISO 178 | 2.4 |
| GENERAL PROPERTIES | | | | |
| Density | - | g/cm ³ | ISO 1183 | 1.17 |
| Mold Shrinkage | - | % | ASTM D955 | 0.4-0.8 |
| Water Absorption | 24hr | % | ASTM D570 | 0.4 |
| Flammability UL94 | 1.5mm | Class | IEC 60695-11-10 | HB |
| RECOMMENDED PROCESSING CONDITIONS | | | | |
| Predrying Temperature | - | °C | - | 70-80 |
| Predrying Time in Desiccant-Type Drier | - | hr | - | 4-6 |
| Melt Temperature | - | °C | - | 210-240 |
| Mold Temperature | - | °C | - | 50-70 |

REMARKS : The listed values should be used for reference purpose only.