

Typical property table

Polycarbonate resin TARFLON™

VT2500



Formosa Idemitsu Petrochemical Corporation (FIPC)

UV-stabilized PC with UV cut-off under 400 nm, iced-clear color and good mold release property. VT grade is mainly used for safety glasses, sun glasses and daylight roof.

| Property                              | Method      | Units                  | VT2500                       |
|---------------------------------------|-------------|------------------------|------------------------------|
| ISO identification mark               | -           | -                      | >PC<                         |
| <b>Physical</b>                       |             |                        |                              |
| MFR                                   | ISO 1133    | g/10min                | 7                            |
| Density                               | ISO 1183    | g/cm <sup>3</sup>      | 1.2                          |
| Water absorption (50%RH 24hr)         | ISO 62      | %                      | 0.23                         |
| <b>Mechanical</b>                     |             |                        |                              |
| Tensile stress at Yield               | ISO 527-1,2 | MPa                    | 65                           |
| Tensile strain at break               | ISO 527-1,2 | %                      | 90                           |
| Flexural strength                     | ISO 178     | MPa                    | 90                           |
| Flexural modulus                      | ISO 178     | GPa                    | 2.2                          |
| Charpy impact strength (Notched)      | ISO 179-1   | kJ/m <sup>2</sup>      | 80                           |
| Rockwell hardness                     | ISO 2039-2  | R/M scale              | R120/M50                     |
| <b>Thermal</b>                        |             |                        |                              |
| Heat deflection temperature (1.8 MPa) | ISO 75-1,2  | °C                     | 125                          |
| Linear thermal expansion coefficient  | ISO 11359-2 | x 10 <sup>-5</sup> /°C | 6.5                          |
| Mold shrinkage                        | ASTM D955   | %                      | 0.5 ~ 0.7                    |
| <b>Optical</b>                        |             |                        |                              |
| Total luminous transmittance          | ISO 13468-1 | %                      | 85 ~ 90                      |
| <b>Electrical</b>                     |             |                        |                              |
| Dielectric strength                   | IEC 60243-1 | kV/mm                  | -                            |
| Volume resistivity                    | ASTM D257   | Ω · cm                 | -                            |
| Dielectric Constant (1 MHz)           | IEC 60250   | -                      | -                            |
| Dielectric dissipation factor (1 MHz) | IEC 60250   | -                      | -                            |
| <b>UL rating</b>                      |             |                        |                              |
| Flammability                          | UL94        | (Class)                | -                            |
| CTI                                   | UL746A      | (PLC level)            | -                            |
| RTI (Elec)                            | UL746B      | °C                     | -                            |
| RTI (Imp)                             | UL746B      | °C                     | -                            |
| RTI (Str)                             | UL746B      | °C                     | -                            |
| UV, water exposure or immersion       | UL746C      | -                      | -                            |
| <b>Standard molding parameters</b>    |             |                        |                              |
| Pre-drying condition                  | -           | -                      | 120 °C, 5~8hours             |
| Cylinder temperature                  | -           | -                      | 260 ~ 300 °C<br>(Max.320 °C) |
| Mold teperature                       | -           | -                      | 80 ~ 120 °C                  |

The above typical data are supplied only for technical information, not guaranteed values. This document may be revised without prior notice.