

TOYO STYRENE

HIPS

| Characteristics                           |                |                   | Injection molding   |            |                |             |               | Extrusion |
|-------------------------------------------|----------------|-------------------|---------------------|------------|----------------|-------------|---------------|-----------|
|                                           |                |                   | Strength & Rigidity | High gloss | Heat resisting | Medium flow | High Strength | Standard  |
| Grade Name                                |                |                   | H350                | H485       | H650           | H700        | H830          | E640N     |
| Melt mass-flow rate (200℃、5kg)            | ISO 1133       | g/10min           | 8.0                 | 4.0        | 3.4            | 11          | 1.9           | 2.7       |
| Vicat softening temperature (load 50N)    | ISO 306        | ℃                 | 88                  | 96         | 96             | 90          | 94            | 94        |
| Heat deflection temperature (load 1.8MPa) | ISO 75-2       | ℃                 | 70                  | 75         | 75             | 71          | 73            | 73        |
| Charpy impact strength (notched)          | ISO 179        | kJ/m <sup>2</sup> | 8                   | 12         | 11             | 10          | 15            | 11        |
| Tensile stress at yield                   | ISO 527-1      | MPa               | 30                  | 37         | 32             | 25          | 28            | 30        |
| Tensile strain at break                   | ISO 527-1      | %                 | 45                  | 40         | 45             | 50          | 57            | 50        |
| Flexural strength                         | ISO 178        | MPa               | 50                  | 60         | 58             | 44          | 48            | 53        |
| Flexural modulus                          | ISO 178        | MPa               | 2500                | 2350       | 2300           | 2150        | 1950          | 2200      |
| Surface gloss                             | JIS K 7105     | %                 | —                   | 92         | —              | —           | —             | 64        |
| Ball pressure test                        | ICE 60695-10-2 | ℃                 | 80                  | 90         | 90             | 80          | —             | —         |
| Flammability (UL94 Classification)        | UL 94          | —                 | HB                  | HB         | HB             | HB          | —             | —         |

| Characteristics                           |                |                   | Injection molding<br>& Extrusion    |
|-------------------------------------------|----------------|-------------------|-------------------------------------|
|                                           |                |                   | Super High gloss<br>& High Strength |
| Grade Name                                |                |                   | XL4                                 |
| Melt mass-flow rate (200℃、5kg)            | ISO 1133       | g/10min           | 2.6                                 |
| Vicat softening temperature (load 50N)    | ISO 306        | ℃                 | 94                                  |
| Heat deflection temperature (load 1.8MPa) | ISO 75-2       | ℃                 | 73                                  |
| Charpy impact strength (notched)          | ISO 179        | kJ/m <sup>2</sup> | 16                                  |
| Tensile stress at yield                   | ISO 527-1      | MPa               | 36                                  |
| Tensile strain at break                   | ISO 527-1      | %                 | 20                                  |
| Flexural strength                         | ISO 178        | MPa               | 56                                  |
| Flexural modulus                          | ISO 178        | MPa               | 2200                                |
| Surface gloss                             | JIS K 7105     | %                 | 99                                  |
| Ball pressure test                        | ICE 60695-10-2 | ℃                 | —                                   |
| Flammability (UL94 Classification)        | UL 94          | —                 | HB                                  |

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※All values and information shown above are subject to revision without notice, they are given