

**TOYOLAC® TP82-X05**

ABS

Toray Industries, Inc.

| <b>Processing/Physical Characteristics</b> | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|--|--------------|-------------------|----------------------|
| <b>ISO Data</b>                            |              |                   |                      |
| Melt flow index, MFI                       | <b>35</b>    | g/10min           | ISO 1133             |
| Temperature                                | <b>220</b>   | °C                | -                    |
| Load                                       | <b>10</b>    | kg                | -                    |
| <b>Mechanical properties</b>               |              |                   |                      |
| <b>ISO Data</b>                            |              |                   |                      |
| Tensile Strength                           | <b>52</b>    | MPa               | ISO 527              |
| Strain at break                            | <b>14</b>    | %                 | ISO 527              |
| Flexural modulus, 23°C                     | <b>2410</b>  | MPa               | ISO 178              |
| Charpy notched impact strength, +23°C      | <b>8</b>     | kJ/m <sup>2</sup> | ISO 179/1eA          |
| <b>ASTM Data</b>                           |              |                   |                      |
| Tensile Strength                           | <b>47</b>    | MPa               | ASTM D 638           |
| Elongation at Break                        | <b>10</b>    | %                 | ASTM D 638           |
| Flexural Modulus                           | <b>2280</b>  | MPa               | ASTM D 790           |
| Rockwell Hardness                          | <b>R 105</b> | -                 | ASTM D 785           |
| <b>Thermal properties</b>                  |              |                   |                      |
| <b>ASTM Data</b>                           |              |                   |                      |
| UL 94 Flame rating                         | <b>V-2</b>   | -                 | UL 94                |
| Thickness tested                           | <b>1.5</b>   | mm                | -                    |
| DTUL @ 264 psi                             | <b>87</b>    | °C                | ASTM D 648           |
| <b>Electrical properties</b>               |              |                   |                      |
| <b>ASTM Data</b>                           |              |                   |                      |
| Surface Resistivity                        | <b>8E12</b>  | Ohm               | ASTM D 257           |
| <b>Other properties</b>                    |              |                   |                      |
| Density                                    | <b>1120</b>  | kg/m <sup>3</sup> | ISO 1183             |
| Density                                    | <b>1120</b>  | kg/m <sup>3</sup> | ASTM D 792           |

**Characteristics****Additives**

Flame retarding agent

**Special Characteristics**

Anti-static, Flame retardant

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa