

**TYPICAL PROPERTIES OF TOYOLAC ASG-20**

| Typical Properties                                | Test Method  | Test Conditions                            | SI Unit  | Typical Value |
|---------------------------------------------------|--------------|--------------------------------------------|----------|---------------|
| <b>Physical</b>                                   |              |                                            |          |               |
| Specific Gravity                                  | ASTM D792    |                                            | -        | 1.22          |
| Mould Shrinkage                                   | ASTM D955    |                                            | %        | 0.1 ~ 0.3     |
| <b>Rheological</b>                                |              |                                            |          |               |
| Melt Flow Rate                                    | ISO 1133     | 240°C / 10 kg                              | g/10 min | 25            |
| <b>Mechanical</b>                                 |              |                                            |          |               |
| Tensile Stress at Break                           | ASTM D638    | at 5 mm/min                                | MPa      | 130           |
| Tensile Strain at break                           | ASTM D638    | at 5 mm/min                                | %        | 3             |
| Flexural Strength                                 | ASTM D790    | at 3 mm/min                                | MPa      | 160           |
| Flexural Modulus                                  | ASTM D790    | at 3 mm/min                                | MPa      | 7200          |
| Rockwell Hardness                                 | ASTM D785    | R scale                                    | -        | 126           |
| Glass Content                                     | Toray Method |                                            | wt%      | 20            |
| <b>Impact</b>                                     |              |                                            |          |               |
| Izod Impact Strength, notched                     | ASTM D256    | 12.7 x 62.5 x 12.7 <sup>1</sup> mm (23°C)  | J/m      | 50            |
| <b>Thermal</b>                                    |              |                                            |          |               |
| HDT (Unannealed) 127 x 12.7 x 6.4 <sup>1</sup> mm | ASTM D648    | 1.82 MPa Loading, 18.56 kg/cm <sup>2</sup> | °C       | 109           |
| <b>Flammability</b>                               |              |                                            |          |               |
| Flammability                                      | UL 94        |                                            | -        | HB            |

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