

**GB33R**

PP-GF

Hanwha TotalEnergies Petrochemical co. Ltd.

| Processing/Physical Characteristics | Value       | Unit              | Test Standard |
|-------------------------------------|-------------|-------------------|---------------|
| <b>ASTM Data</b>                    |             |                   |               |
| Melt Flow Index, MFI                | <b>5</b>    | g/10min           | ASTM D 1238   |
| Temperature                         | <b>230</b>  | °C                | -             |
| <b>Mechanical properties</b>        |             |                   |               |
| <b>ASTM Data</b>                    |             |                   |               |
| Tensile Strength                    | <b>78.5</b> | MPa               | ASTM D 638    |
| Elongation at Break                 | <b>3</b>    | %                 | ASTM D 638    |
| Flexural Modulus                    | <b>4611</b> | MPa               | ASTM D 790    |
| Flexural Strength                   | <b>98</b>   | MPa               | ASTM D 790    |
| Rockwell Hardness                   | <b>R 98</b> | -                 | ASTM D 785    |
| Izod Impact notched, 1/8 in         | <b>245</b>  | J/m               | ASTM D 256    |
| <b>Thermal properties</b>           |             |                   |               |
| <b>ASTM Data</b>                    |             |                   |               |
| UL 94 Flame rating                  | <b>HB</b>   | -                 | UL 94         |
| DTUL @ 66 psi                       | <b>160</b>  | °C                | ASTM D 648    |
| <b>Other properties</b>             |             |                   |               |
| Density                             | <b>1120</b> | kg/m <sup>3</sup> | ASTM D 792    |

**Characteristics****Processing**

Other Extrusion

**Applications**

Automotive, Electrical and Electronical

**Special Characteristics**

High impact or impact modified, Heat stabilized or stable to heat

**Regional Availability**

Asia Pacific