

## Technical Datasheet

Ver.2018

|                          |  |                   |                 |
|--------------------------|--|-------------------|-----------------|
| <b>Material Type</b>     | <b>PA66</b>  | <b>Grade Name</b> | <b>D222-G50</b> |
| <b>Features</b>          | <ul style="list-style-type: none"> <li>• High Heat Resistance</li> <li>• High Rigidity</li> <li>• Good Fatigue Resistance</li> </ul> |                   |                 |
| <b>Material Standard</b> |  |                   |                 |
| <b>Availability</b>      | North America/Asia-Pacific   |                   |                 |
| <b>Process Method</b>    | Injection Molding  |                   |                 |
| <b>Appearance</b>        | Colors Optional  |                   |                 |
| <b>Applications</b>      | Automotive Application,Tools, Power & Others   |                   |                 |

### General Properties

| No. | Properties                   | Methods     | Units             | Values | Test Conditions |
|-----|------------------------------|-------------|-------------------|--------|-----------------|
| 1   | Density                      | ISO 1183-1  | g/cm <sup>3</sup> | 1.55   |                 |
| 2   | Tensile Strength at Max Load | ISO 527-2   | MPa               | 225    | 5mm/min         |
| 3   | Notched Impact Strength      | ISO 179-1   | kJ/m <sup>2</sup> | 17     | 23°C            |
| 4   | Notched Impact Strength      | ISO 179-1   | kJ/m <sup>2</sup> | 12     | -30°C           |
| 5   | Filler Content               | ISO 3451-1  | %                 | 50     |                 |
| 6   | Elongation at Break          | ISO 527-2   | %                 | 2.5    | 5mm/min         |
| 7   | Tensile Modulus              | ISO 527-2   | MPa               | 15500  | 1mm/min         |
| 8   | Flexural Strength            | ISO 178     | MPa               | 350    | 2mm/min         |
| 9   | Flexural Modulus             | ISO 178     | MPa               | 14000  | 2mm/min         |
| 10  | Impact Strength              | ISO 179-1   | kJ/m <sup>2</sup> | 95     | 23°C            |
| 11  | Heat Deflection Temp.        | ISO 75-2    | °C                | 250    | 1.8MPa,120°C/h  |
| 12  | Heat Deflection Temp.        | ISO 75-2    | °C                | 255    | 0.45MPa,120°C/h |
| 13  | Melt Temp.                   | ISO 11357-3 | °C                | 262    |                 |

### Processing Conditions

|                           |   |                         |        |
|---------------------------|---|-------------------------|--------|
| <b>Drying Cond.</b>       | • 110-130°C * 4-6h                            | <b>Moisture Control</b> | • <0.1 |
| <b>Injection Temp.</b>    | • 275-295 °C(F), 275-300 °C(M), 270-290 °C(B) |                         |        |
| <b>Injection Speed</b>    | • Medium to High                              |                         |        |
| <b>Injection Pressure</b> | • 40-110 MPa                                  |                         |        |
| <b>Back Pressure</b>      | • 0-5 MPa                                     |                         |        |
| <b>Mold Temp.</b>         | • 110-130 °C                                  |                         |        |

Note : The technical data above are authentic and reliable for reference.These value cannot be defined as the minimal performance value.