

## ParsaFlex 25204G

Compounded Polyolefin

### Description

ParsaFlex 25204G is a mineral filled modified polypropylene with good flow characteristics. It provides reasonable stiffness and high impact resistance. The material is UV stabilized and demonstrates good scratch resistance and low odor. ParsaFlex 25204G has been particularly designed for injection molding of automotive interior parts and trims.

### Characteristics

**Material Status:** Commercial: Active

**Filler/Reinforcement:** Mineral Filler , 20% by weight

**Appearance:** Color-Matched

**Form:** Pellets

**Processing Method:** Injection molding

### Applications

Automotive applications, Interior parts, and Consoles

### Properties

| Physical                             | Value     | Unit              | Test Method |
|--------------------------------------|-----------|-------------------|-------------|
| Density                              | 1.04      | g/cm <sup>3</sup> | ASTM D792   |
| Molding Shrinkage                    |           | %                 | ASTM D955   |
| Across Flow                          | 1.0 - 1.2 |                   |             |
| Flow                                 |           |                   |             |
| Melt Flow Rate (MFR) (230°C/2.16 kg) | 7 - 9     | g/10min           | ASTM D1238  |
| Flammability                         | HB        | -                 | UL 94       |
| Mechanical                           | Value     | Unit              | Test Method |
| Tensile Modulus (50 mm/min)          | 1800      | MPa               | ASTM D638   |
| Tensile Stress (50 mm/min)           |           | MPa               | ASTM D638   |
| Yield                                | 18        |                   |             |
| Break                                | 13        |                   |             |

|                                  |               |                   |                    |
|----------------------------------|---------------|-------------------|--------------------|
| Tensile Strain (50 mm/min)       |               | %                 | ASTM D638          |
| Yield                            | 6             |                   |                    |
| Break                            | > 50          |                   |                    |
| Flexural Modulus                 | 1750          | MPa               | ASTM D790          |
| Flexural Stress @ Yield          | 20            | MPa               | ASTM D790          |
| Flexural Strain @ Yield          | NA            | %                 | ASTM D790          |
| Charpy Notched Impact Strength   |               | kJ/m <sup>2</sup> | ASTM D6110         |
| @ 23 °C                          | 25            |                   |                    |
| @ 0 °C                           | 8             |                   |                    |
| @ -20 °C                         | 5             |                   |                    |
| Charpy Unnotched Impact Strength |               | kJ/m <sup>2</sup> | ASTM D6110         |
| @ 23 °C                          | No Break      |                   |                    |
| Izod Notched Impact Strength     |               | kJ/m <sup>2</sup> | ASTM D256          |
| @ 23 °C                          | 23            |                   |                    |
| @ 0 °C                           | 7             |                   |                    |
| @ -20 °C                         | 4.5           |                   |                    |
| Scratch Resistance (2N)          | 110           | MPa               | ASTM G171-03       |
| Hardness (Shore D)               | 63            |                   | ASTM D2240         |
| <b>Thermal</b>                   | <b>Value</b>  | <b>Unit</b>       | <b>Test Method</b> |
| Heat Deflection Temperature      |               | °C                | ASTM D648          |
| 1.82 MPa, Unannealed             | 55            |                   |                    |
| 0.455 MPa, Unannealed            | 105           |                   |                    |
| Vicat Softening Temperature      | NA            | °C                | ASTM D1525         |
| <b>Processing Conditions</b>     |               |                   |                    |
| Drying Temperature               | 80 °C         |                   |                    |
| Drying Time                      | 2h            |                   |                    |
| Barrel Temperature               | 190 - 230 °C  |                   |                    |
| Melt Temperature                 | 210 - 240 °C  |                   |                    |
| Mould Temperature                | 30 - 50 °C    |                   |                    |
| Injection Speed                  | Low to medium |                   |                    |
| Hold Pressure                    | 30 - 60 MPa   |                   |                    |

**Notes:**

*Typical properties: these are not to be construed as specifications.*