

# ExxonMobil™ PP1222F

## Polypropylene Homopolymer

### Product Description

A medium melt flow rate, 20% mineral-filled compounded resin suitable for injection molded consumer products and appliance applications requiring long-term heat ageing resistance. UL continuous service rating of 95°C.

### General

|                           |                                                                                        |                                                                                                               |                                                                                       |
|---------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Features                  | <ul style="list-style-type: none"> <li>Detergent Resistant</li> <li>Filled</li> </ul>  | <ul style="list-style-type: none"> <li>Good Thermal Aging Resistance</li> <li>High Heat Resistance</li> </ul> | <ul style="list-style-type: none"> <li>High Stiffness</li> <li>Medium Flow</li> </ul> |
| Automotive Specifications | CHRYSLER MS-DB-500                                                                     |                                                                                                               |                                                                                       |
| Appearance                | Natural Color                                                                          |                                                                                                               |                                                                                       |
| Form(s)                   | Pellets                                                                                |                                                                                                               |                                                                                       |
| Processing Method         | <ul style="list-style-type: none"> <li>Extrusion</li> <li>Injection Molding</li> </ul> |                                                                                                               |                                                                                       |

| Physical                                  | Typical Value (English) | Typical Value (SI)  | Test Based On     |
|-------------------------------------------|-------------------------|---------------------|-------------------|
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 5.0 g/10 min            | 5.0 g/10 min        | ASTM D1238        |
| Density                                   | 1 g/cm <sup>3</sup>     | 1 g/cm <sup>3</sup> | ExxonMobil Method |

| Mechanical                                                  | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------------------------------------|-------------------------|--------------------|---------------|
| Tensile Strength at Yield<br>2.0 in/min (51 mm/min)         | 5340 psi                | 36.8 MPa           | ASTM D638     |
| Elongation at Yield (2.0 in/min (51 mm/min))                | 5.8 %                   | 5.8 %              | ASTM D638     |
| Flexural Modulus - 1% Secant<br>(0.051 in/min (1.3 mm/min)) | 347000 psi              | 2390 MPa           | ASTM D790A    |

| Impact                            | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------------|-------------------------|--------------------|---------------|
| Notched Izod Impact (73°F (23°C)) | 0.40 ft-lb/in           | 22 J/m             | ASTM D256A    |

| Thermal                                                            | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------------------------------------------------------|-------------------------|--------------------|---------------|
| Deflection Temperature Under Load (DTUL)<br>at 66psi - Unannealed  | 266 °F                  | 130 °C             | ASTM D648     |
| Deflection Temperature Under Load (DTUL)<br>at 264psi - Unannealed | 160 °F                  | 70.9 °C            | ASTM D648     |

