

# RESILIENCE® PP5420 B1

## GEON Performance Solutions - Polypropylene Homopolymer

Monday, June 17, 2024

### General Information

#### Product Description

The GEON® family of polypropylene- and polyethylene-based products covers a wide range of applications, markets and performance requirements. Standard grades are compounded with calcium carbonate, glass and talc to provide a desired balance of properties including stiffness, durability, impact resistance and heat resistance. Custom grades are available with features such as UV stabilizers, heat stabilizers, custom color, high impact, etc.

#### General

|                           |                                                          |                                              |                           |
|---------------------------|----------------------------------------------------------|----------------------------------------------|---------------------------|
| Material Status           | • Commercial: Active                                     |                                              |                           |
| Availability              | • Africa & Middle East                                   | • Europe                                     | • North America           |
| Filler / Reinforcement    | • Glass Fiber                                            |                                              |                           |
| Features                  | • General Purpose                                        |                                              |                           |
| Uses                      | • Automotive Applications<br>• Construction Applications | • Consumer Applications<br>• General Purpose | • Industrial Applications |
| Automotive Specifications | • GM GMP.PP.099                                          |                                              |                           |
| Appearance                | • Black                                                  |                                              |                           |
| Forms                     | • Pellets                                                |                                              |                           |
| Processing Method         | • Injection Molding                                      |                                              |                           |

### ASTM & ISO Properties <sup>1</sup>

| Physical                          | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
|-----------------------------------|---------------------------|------------------------|-------------|
| Density                           | 1.05 g/cm <sup>3</sup>    | 1.05 g/cm <sup>3</sup> | ISO 1183    |
| Melt Mass-Flow Rate (MFR)         | 4.0 g/10 min              | 4.0 g/10 min           | ISO 1133    |
| Mechanical                        | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
| Tensile Stress                    | 9720 psi                  | 67.0 MPa               | ISO 527-2   |
| Flexural Modulus                  | 508000 psi                | 3500 MPa               | ISO 178     |
| Impact                            | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
| Notched Izod Impact Strength      | 4.3 ft·lb/in <sup>2</sup> | 9.0 kJ/m <sup>2</sup>  | ISO 180     |
| Thermal                           | Nominal Value (English)   | Nominal Value (SI)     | Test Method |
| Deflection Temperature Under Load |                           |                        |             |
| 66 psi (0.45 MPa), Unannealed     | 306 °F                    | 152 °C                 | ISO 75-2/B  |
| 264 psi (1.8 MPa), Unannealed     | 286 °F                    | 141 °C                 | ISO 75-2/A  |

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.