



# Maxxam™ PP5120 B4

## Polypropylene Homopolymer

### Key Characteristics

#### Product Description

PolyOne's Maxxam™ 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                                     |                                              |                           |
| Regional Availability  | • Africa & Middle East<br>• Asia Pacific                 | • Europe<br>• Latin America                  | • North America           |
| Filler / Reinforcement | • Talc/Mineral, 21% Filler by Weight                     |                                              |                           |
| Features               | • General Purpose                                        | • Homopolymer                                |                           |
| Uses                   | • Automotive Applications<br>• Construction Applications | • Consumer Applications<br>• General Purpose | • Industrial Applications |
| Forms                  | • Pellets                                                |                                              |                           |
| Processing Method      | • Injection Molding                                      |                                              |                           |

### Technical Properties <sup>1</sup>

| Physical                                  | Typical Value (English)      | Typical Value (SI)          | Test Method |
|-------------------------------------------|------------------------------|-----------------------------|-------------|
| Specific Gravity                          | 1.07                         | 1.07                        | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 9.8 g/10 min                 | 9.8 g/10 min                | ISO 1133    |
| Melt Volume-Flow Rate (MVR)               | 0.732 in <sup>3</sup> /10min | 12.0 cm <sup>3</sup> /10min | ISO 1133    |
| Mechanical                                | Typical Value (English)      | Typical Value (SI)          | Test Method |
| Tensile Stress <sup>2</sup> (Yield)       | 4640 psi                     | 32.0 MPa                    | ISO 527     |
| Flexural Modulus <sup>3</sup>             | 334000 psi                   | 2300 MPa                    | ISO 178     |
| Impact                                    | Typical Value (English)      | Typical Value (SI)          | Test Method |
| Notched Izod Impact Strength              |                              |                             | ISO 180     |
| -40°F (-40°C)                             | 0.97 ft·lb/in <sup>2</sup>   | 2.0 kJ/m <sup>2</sup>       |             |
| 73°F (23°C)                               | 1.3 ft·lb/in <sup>2</sup>    | 2.7 kJ/m <sup>2</sup>       |             |
| Thermal                                   | Typical Value (English)      | Typical Value (SI)          | Test Method |
| Heat Deflection Temperature               |                              |                             | ISO 75-2/B  |
| 66 psi (0.45 MPa), Unannealed             | 275 °F                       | 135 °C                      |             |
| Heat Deflection Temperature               |                              |                             | ISO 75-2/A  |
| 264 psi (1.8 MPa), Unannealed             | 158 °F                       | 70.0 °C                     |             |

#### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> 0.20 in/min (5 mm/min)

<sup>3</sup> 0.079 in/min (2.0 mm/min)

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