

## Technical Data Sheet

### Moplen EP500V

Polypropylene, Impact Copolymer

#### Product Description

Moplen EP500V is an ultra high fluidity polypropylene copolymer used for injection moulding applications. The product combines high stiffness with good impact resistance, even at sub-zero temperatures. Moplen EP500V is extensively used for items with long flow paths. It is not intended for medical and pharmaceutical applications.

|                   |                                                                                                        |
|-------------------|--------------------------------------------------------------------------------------------------------|
| Application       | Containers; Housewares; Sports, Leisure & Toys; TWIM Food Containers                                   |
| Market            | Compounding; Consumer Products; Rigid Packaging                                                        |
| Processing Method | Compounding; Injection Molding                                                                         |
| Attribute         | Good Impact Resistance; Good Stiffness; High Flow; Impact Copolymer; Low Temperature Impact Resistance |

| Typical Properties                                    | Nominal Value | Units                   | Test Method   |
|-------------------------------------------------------|---------------|-------------------------|---------------|
| <b>Physical</b>                                       |               |                         |               |
| Melt Flow Rate, (230 °C/2.16 kg)                      | 100           | g/10 min                | ISO 1133-1    |
| Melt Volume Flow Rate, (230 °C/2.16 kg)               | 135           | cm <sup>3</sup> /10 min | ISO 1133-1    |
| Density                                               | 0.90          | g/cm <sup>3</sup>       | ISO 1183-1    |
| <b>Mechanical</b>                                     |               |                         |               |
| Flexural Modulus                                      | 1100          | MPa                     | ISO 178       |
| Tensile Modulus                                       | 1100          | MPa                     | ISO 527-1, -2 |
| Tensile Stress at Yield                               | 24            | MPa                     | ISO 527-1, -2 |
| Tensile Strain at Yield                               | 5             | %                       | ISO 527-1, -2 |
| <b>Impact</b>                                         |               |                         |               |
| Charpy Impact Strength - Notched                      |               |                         |               |
| (23 °C)                                               | 5.0           | kJ/m <sup>2</sup>       | ISO 179       |
| (0 °C)                                                | 3             | kJ/m <sup>2</sup>       | ISO 179       |
| (-20 °C)                                              | 2             | kJ/m <sup>2</sup>       | ISO 179       |
| <b>Hardness</b>                                       |               |                         |               |
| Ball Indentation Hardness                             | 81            | MPa                     | ISO 2039-1    |
| <b>Thermal</b>                                        |               |                         |               |
| Vicat Softening Temperature                           |               |                         |               |
| (A/50)                                                | 149           | °C                      | ISO 306       |
| (B50)                                                 | 74            | °C                      | ISO 306       |
| Heat Deflection Temperature B, (0.45 MPa, Unannealed) | 93            | °C                      | ISO 75B-1, -2 |