

## Technical Data Sheet

### Moplen HP456K

Polypropylene, Homopolymer

#### Product Description

Moplen HP456K is a polypropylene homopolymer used for extrusion and thermoforming applications. Moplen HP456K is formulated with a low water-carry-over additive package. Typical applications are monofilaments, ropes and tapes.

The grade is being in development, this is a preliminary datasheet subjected to changes after product industrialization

#### Regulatory Status

This grade is not intended for medical and pharmaceutical applications.

|                          |                                                                                 |
|--------------------------|---------------------------------------------------------------------------------|
| <b>Application</b>       | General Sheet Extrusion; Intermediate Bulk Containers; Raffia/Tapes/Strapping   |
| <b>Market</b>            | Compounding; Flexible Packaging; Industrial Packaging; Rigid Packaging; Textile |
| <b>Processing Method</b> | Compounding; Extrusion Flat-die; Tapes & Raffia; Thermoforming                  |
| <b>Attribute</b>         | Homopolymer                                                                     |

| Typical Properties                                        | Nominal Value | Units             | Test Method   |
|-----------------------------------------------------------|---------------|-------------------|---------------|
| <b>Physical</b>                                           |               |                   |               |
| Melt Flow Rate, (230 °C/2.16 kg)                          | 4.5           | g/10 min          | ISO 1133-1    |
| Density                                                   | 0.900         | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Mechanical</b>                                         |               |                   |               |
| Flexural Modulus                                          | 1450          | N/mm <sup>2</sup> | ISO 178       |
| Tensile Modulus                                           | 1500          | MPa               | ISO 527-1, -2 |
| Tensile Stress at Break, (23 °C, 50 mm/min)               | 16.4          | N/mm <sup>2</sup> | ISO 527-1, -2 |
| Tensile Stress at Yield, (23 °C, 50 mm/min)               | 34.5          | N/mm <sup>2</sup> | ISO 527-1, -2 |
| Tensile Strain at Break, (23 °C, 50 mm/min)               | 73            | %                 | ISO 527-1, -2 |
| Tensile Strain at Yield, (23 °C, 50 mm/min)               | 9.2           | %                 | ISO 527-1, -2 |
| <b>Thermal</b>                                            |               |                   |               |
| Vicat Softening Temperature, (A50)                        | 156           | °C                | ISO 306       |
| Deflection Temperature Under Load, (0.45 MPa, Unannealed) | 83            | °C                | ISO 75B-1, -2 |