

## Technical Data Sheet

# HP500K

Polypropylene, Homopolymer



### Product Description

AGIPC HP500K is a polypropylene homopolymer with a Melt Flow Rate (MFR) especially suitable for the extrusion of filament yarns, monofilaments, tapes, raffia, and sheets for thermoforming. This grade offers excellent processability and good mechanical properties. AGIPC HP500K is designed for producing films that can be converted into stretched tapes for weaving applications. Textile film yarns with a denier count of 900 to 1000 or less are used to manufacture carpet backings, bags, industrial fabrics, and mats.

<b>Processing Method</b>	Injection Molding; Monofilament; Sheet and Profile Extrusion; Tape & Raffia
<b>Additive</b>	Anti Oxidant: Irganox 1010 (450 ppm), Irgafos 168 (900 ppm); Acid Scavenger: Ca Stearate (450 ppm)
<b>Application</b>	Filament Yarn; Monofilaments; Raffia; Rigid Sheet; Semi-Rigid Sheet; Embossed Sheet; Toys; Non-Food Packaging; General Packaging

Typical Properties	Value	Unit	Test Method
<b>Physical</b>			
Density	0.9	g/cm <sup>3</sup>	ASTM D1505
MFR (2.16 kg, 230 °C)	4.3	g/10 min	ASTM D1238
<b>Mechanical</b>			
Flexural Modulus (1% Secant)	1400	MPa	ASTM D790
Tensile Strength at Yield (Type 1, 23 °C, 50 mm/min)	36	MPa	ASTM D638
Tensile Elongation at Yield (Type 1, 23 °C, 50 mm/min)	12	%	ASTM D638
Tensile Strength at Break (Type 1, 23 °C, 50 mm/min)	20	MPa	ASTM D638
Tensile Elongation at Break (Type 1, 23 °C, 50 mm/min)	330	%	ASTM D638
Rockwell Hardness (R Scale)	98		ASTM D785
Izod Impact Strength (Notched, 23 °C)	40	J/m	ASTM D256
<b>Thermal</b>			
Heat Deflection Temperature (Unannealed, 0.46 MPa)	85	°C	ASTM D648
Vicat Softening Temperature (10 N, 50 °C/h)	154	°C	ASTM D1525

### Packaging

Product is supplied in 25 kg small bags & 1000 kg big bags (jumbo bags). Small bags are secured with stretch hood protection for maximum integrity during storage and transit.

### Storage

For optimal shelf life, store in covered warehouses away from sunlight, dust, and humidity.

### Disclaimer

The technical information and data provided in this data sheet are given in good faith based on our current knowledge. However, this information is intended for guidance only and does not constitute a guarantee of specific properties under various application conditions. It is the buyer's responsibility to determine the product's suitability for the intended use and comply with all relevant regulations. We recommend consulting with our technical experts before purchasing and using the product to ensure its suitability for your specific requirements.

