

TECHNICAL DATA SHEET

R103

Polypropylene Homopolymer

Characteristics

R103 is a **Polypropylene Homopolymer**, produced by the latest generation **Spheripol II Technology**. This homopolymer is primarily suitable for **Extrusion process**.

R103 combines **exceptional processability with low Water Carry Over, excellent strength & Toughness and good Color Stability**.

Application

- **Stretched Tapes** for Woven sacks for **Packaging Fertilizers, Cement, Polymers, Food Grains & Carpet Backing**
- Stretched Tapes for **FIBC**
- Stretched **Ropes & Yarns**

Property	Test Method	Unit	Value
Melt Flow Index (2.16 kg & 230 ⁰ C)	ASTM D 1238	g/10 min	3.3
Density at 23°C	ASTM D 1505	g/cm ³	0.90
Tensile Strength at Yield (50 mm/min)	ASTM D 638 (Type I - with Extensometer)	MPa	34
Tensile Elongation at Yield (50 mm/min)		%	9
Flexural Modulus	ASTM D 790A	MPa	1450
Notched Izod Impact Strength (23°C)	ASTM D 256A	J/m	40
Vicat Softening Point (10N)	ASTM D 1525	⁰ C	153
Heat Deflection Temperature (0.455 MPa)	ASTM D 648	⁰ C	93

Typical Processing Temperature

Barrel Temperature	⁰ C	220 - 280
Die Temperature	⁰ C	260 - 280
Quench Temperature	⁰ C	30 - 40
Stretching Temperature	⁰ C	≈160 (Oven)

Mechanical properties are tested on Injection Molded Test Specimens prepared as per ASTM D 4101

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