

TECHNICAL DATA SHEET

R103

Polypropylene Homopolymer

Characteristics

R103 is a **Polypropylene Homopolymer**, produced by the latest generation **Spheripol 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
Density at 23°C	ASTM D 1505	g/cm ³	0.90
Tensile Strength at Yield	ASTM D 638 *	MPa	34
Tensile Elongation at Yield	(Type I - with Extensometer)	%	8
Flexural Modulus	ASTM D 790	MPa	1450
Izod Impact Strength (Notch, 23°C)	ASTM D 256	J/m	30
Vicat Softening Point (10N)	ASTM D 1525	⁰ C	153
Heat Deflection Temperature (0.46 N/m ²)	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 - Oven	⁰ C	155 - 165

* *Mechanical properties tested on Injection Molded Test Specimens (Type I)*

The above typical properties are not to be construed as Specifications and may change without any prior notice. The User will solely be responsible for any intended process / product usage and HPL does not guarantee or undertake any responsibility for any consequential damage or loss based on the information given above.