Technical Data Sheet

*Circulen*Renew C14 HP456J

Polypropylene, Homopolymer

Product Description

*Circulen*Renew C14 HP456J is part of the *Circulen©* product family of circular and sustainable solutions. *Circulen*Renew C14 polymer reduces the carbon footprint as it replaces fossil feedstock through using renewable raw materials made from bio-based waste and residue oils. The renewable content of *Circulen*Renew C14 is measured by an accredited third party laboratory and stated as a parameter on the Certificate of Analysis (CoA).

*Circulen*Renew C14 HP456J is a drop-in solution and therefore doesn't require any adaptation of the existing processing equipment.
*Circulen*Renew C14 HP456J is a polypropylene homopolymer used for extrusion and thermoforming applications.
*Circulen*Renew C14 HP456J is formulated with a low water-carry-over additive package. Typical applications are monofilaments, ropes, tapes and films.

This grade is not intended for medical and pharmaceutical applications.

Application	Cast Stretch Film; General Purpose Film Packaging; Raffia/Tapes/Strapping; Strapping
Market	Textile
Processing Method	Tapes & Raffia
Attribute	Homopolymer

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	3.4	g/10 min	ISO 1133-1
Density	0.900	g/cm³	ISO 1183-1
Mechanical			
Flexural Modulus	1500	N/mm²	ISO 178
Tensile Stress at Break, (23 °C, 50 mm/min)	21	N/mm²	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	34	N/mm²	ISO 527-1, -2
Tensile Strain at Break, (23 °C, 50 mm/min)	200	%	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	11	%	ISO 527-1, -2
Thermal			
Vicat Softening Temperature, (A50)	156	°C	ISO 306
Deflection Temperature Under Load, (0.45 MPa, Unannealed)	91	°C	ISO 75B-1, -2