

Technical Data Sheet

Circulen HP456J



Polypropylene, Homopolymer

Product Description

Circulen HP456J is a circular polymer, which contains building blocks from non-mechanical recycling processes converting renewables and organic or plastic wastes into new cracker feedstock.

The content of recycled cracker feedstock is certified by mass balance.

Circulen HP456J is a polypropylene homopolymer used for extrusion and thermoforming applications. *Circulen* HP456J is formulated with a low water-carry-over additive package. Typical applications are monofilaments, ropes and tapes.

Status	Commercial: Active
Availability	Africa-Middle East; Europe
Application	Intermediate Bulk Containers; Raffia/Tapes/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/cm ³	ISO 1183-1
Mechanical			
Flexural Modulus	1400	N/mm ²	ISO 178
Tensile Stress at Break, (23 °C, 50 mm/min)	23	N/mm ²	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	34	N/mm ²	ISO 527-1, -2
Tensile Strain at Break, (23 °C, 50 mm/min)	600	%	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	11	%	ISO 527-1, -2
Thermal			
Vicat Softening Temperature, (A50)	153	°C	ISO 306
Deflection Temperature Under Load, (0.45 MPa, Unannealed)	90	°C	ISO 75B-1, -2