Technical Data Sheet

*Circulen*Renew C14 HP640J

Polypropylene, Homopolymer

Product Description

*Circulen*Renew C14 HP640J is part of the *Circulen* product family of circular and sustainable solutions. *Circulen*Renew C14 HP640J polymer reduces the carbon footprint as it replaces fossil feedstock through using renewable raw material 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 HP640J is a drop-in solution and therefore doesn't require any adaptation of the existing processing equipment.
*Circulen*Renew C14 HP640J is a nucleated homopolymer for extrusion and thermoforming applications.
*Circulen*Renew C14 HP640J exhibits a good stiffness and transparency.
The main applications of *Circulen*Renew C14 HP640J are fruit baskets,trays,transparent drinking cups and containers.

This grade is not intended for medical and pharmaceutical applications.

Application	Clear Containers; Thermoformed Food Containers
Market	Rigid Packaging
Processing Method	Sheet and Profile Extrusion; Thermoforming
Attribute	Homopolymer; Medium Stiffness; Medium Transparency; Nucleated

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	3.2	g/10 min	ISO 1133-1
Density	0.90	g/cm³	ISO 1183-1
Mechanical			
Tensile Modulus	1600	MPa	ISO 527-1, -2
Tensile Stress at Yield, (23 °C)	37	MPa	ISO 527-1, -2
Tensile Strain at Break	>50	%	ISO 527-1, -2
Tensile Strain at Yield	9	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	7	kJ/m²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	78	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (A50)	154	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	90	°C	ISO 75B-1, -2
Optical			
Haze, (1 mm)	30	%	ASTM D1003
Gloss, (60°)	113	%	ASTM D2457