Technical Data Sheet

*Circulen*Renew C14 EP348U

Polypropylene, Impact Copolymer

Product Description

*Circulen*Renew C14 EP348U is part of the *Circulen©* product family of circular and sustainable solutions. C*irculen*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 C*irculen*Renew C14 is measured by an accredited third party laboratory and stated as a parameter on the Certificate of Analysis (CoA).

*Circulen*Renew C14 EP348U is a drop-in solution and therefore doesn't require any adaptation of the existing processing equipment.

*Circulen*Renew C14 EP348U is a nucleated, antistatic formulated, very high flow impact copolymer suitable for thin-walled injection molding applications.
*Circulen*Renew C14 EP348U combines an excellent processability with a very good impact strength at low temperature.
*Circulen*Renew C14 EP348U is typically used by customers for margarine tubs, packaging for dairy products, ice cream containers, lids, caps, housewares, toy boxes, flower pots and laundry baskets

This grade is not intended for medical and pharmaceutical applications.

Application	Caps & Closures; Housewares; Opaque Containers
Market	Consumer Products; Rigid Packaging
Processing Method	Injection Molding
Attribute	Good Processability; High Impact Resistance; Medium Stiffness; Nucleated

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	70	g/10 min	ISO 1133-1
Density, (23 °C)	0.90	g/cm³	ISO 1183-1
Mechanical			
Tensile Modulus	1200	MPa	ISO 527-1, -2
Tensile Stress at Yield	24	MPa	ISO 527-1, -2
Tensile Strain at Break	50	%	ISO 527-1, -2
Tensile Strain at Yield	4	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.5	kJ/m²	ISO 179
(0 °C, Type 1, Edgewise, Notch A)	4	kJ/m²	ISO 179
(-20 °C, Type 1, Edgewise, Notch A)	3.2	kJ/m²	ISO 179
Ductile/Brittle Transition Temperature	-45	°C	ISO 6603-2

Hardness			
Ball Indentation Hardness, (H 358/30)	50	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(A/50)	150	°C	ISO 306
(B50)	65	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	92	°C	ISO 75B-1, -2
Optical			
Gloss, (60°)	65	%	ASTM D2457